

TENNESSEE CONSOLIDATED RETIREMENT SYSTEM
BOARD OF TRUSTEES MEETING
MARCH 27, 2015

**TENNESSEE CONSOLIDATED RETIREMENT SYSTEM
BOARD OF TRUSTEES MEETING
MARCH 27, 2015**

TABLE OF CONTENTS

Minutes of the Board of Trustees	3
Committee Minutes	
Administrative Committee.....	9
Audit Committee	11
Investment Committee.....	15
Investment Policy.....	21
Political Subdivision Seeking Membership	
City of Tullahoma	25
Statistical Reports	
Active Member Statistics	35
Retired Payroll Statistics	36
Refund Activity and Expenditures	38
Prior Service Activity	40
Disability Retirement Report	
Disability Statistical Report	43
Approved for Disability	45
Disapproved for Disability	55
TCRS Financial Report	59

**MINUTES OF THE
BOARD OF TRUSTEES MEETING
DECEMBER 12, 2014**

Minutes of the TCRS Board of Trustees meeting on December 12, 2014

The Board of Trustees of the Tennessee Consolidated Retirement System met on Friday, December 12, 2014 at 10:10 a.m. The meeting was held in Room 30 of the Legislative Plaza with Chairman David Lillard presiding.

Chairman Lillard announced that Mr. Jamie Wayman, Assistant Director of TCRS, was the acting secretary for the meeting.

Chairman Lillard asked Mr. Wayman to conduct an attendance roll call. The following members were present: Chairman David Lillard, State Treasurer; Commissioner Rebecca Hunter, Department of Human Resources; Mr. Michael Barker, Ms. Patsy Moore, Mr. Bill Kemp, Mr. Ken Wilber, Mr. Harold Morrison, Mr. Kevin Fielden, Ms. Angie Judish, Mr. Alfred Laney, Mr. Bob Wormsley, and Mr. Charles Archer.

Approval of the September 26, 2014 Minutes of the Board of Trustees

On a motion by Mr. Wilber and seconded by Mr. Laney, the minutes of the September 26, 2014 TCRS Board of Trustees meeting were unanimously approved.

Audit Committee Appointment

Chairman Lillard recommended Mr. Charles Archer be appointed to the audit committee.

On a motion by Mr. Barker and seconded by Mr. Kemp, the Board unanimously approved Mr. Archer's appointment to the audit committee.

Board of Trustees Committee Reports

Chairman Lillard recognized Mr. Barker to provide the audit committee report. Mr. Barker mentioned the audit committee received an update on the Concord System. He noted that Ms. Britt Wood is assisting with the audit of the system. The audit committee also reviewed the private equity disclosure listing.

Chairman Lillard recognized Mr. Jamie Wayman to review the administrative committee report. Mr. Wayman stated that Mr. Fred Marshall provided an update on the Concord system. The administrative committee discussed employer reporting in Concord. Mr. Wayman mentioned 97% of employers have reported by the December 10, 2014 deadline. In addition, the committee was provided an update on retirement applications being processed. An update on GASB Standards 67, 68, and 71 was provided. The administrative committee also reviewed the political subdivisions requesting membership in TCRS.

Chairman Lillard reviewed the investment committee meeting. Chairman Lillard mentioned the investment committee considered and approved several real estate and strategic lending transactions. The committee also reviewed a presentation on the private equity portfolio and a real estate strategic overview.

Investment Report

Mr. Brakebill introduced Mr. Patrick Thomas from Strategic Investment Solutions to address both trends in the global capital markets and the TCRS portfolio. Mr. Thomas began by discussing global market trends, highlighting the strengthening US economy despite slow growth in Europe and economic contraction in Japan. Increasing volatility was addressed, with emphasis on the precipitous decline in oil prices over recent months. From an asset class perspective, small capitalization US equities have lagged large capitalization equities by a wide margin. Furthermore, both developed and emerging market equities have lagged US equities by a substantial margin.

Regarding the TCRS portfolio, Mr. Thomas noted a return of 11.3% over the trailing year. Lower exposure to non-US equities and a bond portfolio with higher quality characteristics and a longer duration than peers contributed to strong performance in relation to peers. The US equity portfolio outperformed its benchmark by 0.81% over the trailing year in a very difficult environment for active management. While the international equity portfolio underperformed its benchmark over the trailing year by 0.39%, excess returns exceeding 2% over a trailing 10-year horizon remain remarkable. US fixed income outperformed its benchmark by 0.67% over the trailing year, with higher quality and duration contributing to strong performance. The total returns posted by TCRS over the trailing year are in the top 5% of the peer group.

Mr. Brakebill then addressed several key initiatives. On the personnel front, Mr. Bill Abney is retiring at the end of the year, and recruiting is ongoing for roles in both fixed income and real estate. As for process, the custodial transfer that took place in early September continues to require efforts from TCRS staff. Three requests for proposal are being generated for a private equity consultant, a CRM / portfolio management software provider for the private equity, real estate and strategic lending programs, and for the generalist consultant. Efforts are being expended to provide more flexibility to the process for selecting and engaging international equity managers. Furthermore, the TCRS investment policy is undergoing a significant overhaul, albeit without any substantial changes to the investment strategy. Noteworthy initiatives in the investment policy overhaul include private equity benchmarking, a modest increase in the exposure to non-core real estate, and the process for alternative investment approval. Mr. Brakebill then addressed efforts expended for the unitization of the TCRS portfolio as an option for the defined contribution plan as well as for the hybrid plan. Finally, a solid start for the securities lending program, which began in February, was noted.

Regarding the portfolio's tactical asset allocation, the asset class weightings have been relatively close to the strategic benchmarks. The overweight of US equities to international equities has been a positive for performance, as has the overweight to US fixed income versus TIPS.

Mr. Brakebill then discussed recent capital market activity at a high level. Notably, the equity and fixed income markets have become disjointed of late with bond yields falling and equities continuing to perform well. Overall, US economic growth appears to be progressing well, while Europe's economy has softened after more encouraging developments earlier in the year. Softness in commodities such as oil, copper, and iron ore were also discussed in the context of a slowing Chinese economy. Finally, the strength of the US dollar was addressed.

As of December 11, 2014, the total value of the TCRS portfolio stood at \$42.7 billion.

Political Subdivisions Petitioning for Membership in TCRS

Mr. Wayman advised the Board that the administrative committee had reviewed the request for participation in TCRS for the Town of Vanleer.

On a motion by Mr. Wormsley and seconded by Mr. Barker, the Board unanimously approved the request for participation in TCRS for the Town of Vanleer.

Mr. Wayman advised the Board that the administrative committee had reviewed the request for participation in TCRS for Russellville-Whitesburg Utility District.

On a motion by Mr. Wormsley and seconded by Mr. Barker, the Board unanimously approved the request for participation in TCRS for Russellville-Whitesburg Utility District.

Other Business

Chairman Lillard advised the Board of Mr. Bill Abney's retirement. Chairman Lillard thanked Mr. Abney for all his service to the investment division and Treasury Department. Chairman Lillard noted there will not be a training session after the Board meeting due to the holiday season.

Adjournment

Chairman Lillard announced the completion of the business at hand and asked if there was any other business to come before the Board.

On a motion by Commissioner Hunter and seconded by Mr. Laney, the Board unanimously approved the TCRS Board of Trustees meeting be adjourned.

With no other business, the Board of Trustees adjourned at 11:00 a.m. on December 12, 2014.

Respectfully Submitted,



Jill Bachus
Director, TCRS

Approved:

David H. Lillard, Jr.
Chairman of the Board

COMMITTEE MINUTES

Minutes of the Administrative Committee

December 12, 2014

The Administrative Committee of the Board of Trustees of the Tennessee Consolidated Retirement System met on Friday, December 12, 2014 at 9:00 a.m. The meeting was held in Room 29 of the Legislative Plaza with Assistant Director Jamie Wayman presiding in the absence of Ms. Jill Bachus.

The following members were present: Mr. Kevin Fielden, Ms. Angie Judish, Mr. Alfred Laney, Ms. Patsy Moore, and Mr. Harold Morrison.

Concord Update

Ms. Wayman introduced Mr. Fred Marshall, TCRS Assistant Director for Concord, to provide an update on the Concord project. Mr. Marshall informed the committee that TCRS and Deloitte continue to review and work on correcting the Problem Incident Reports (PIRs). A build correcting PIRs that TCRS has identified as the most important is delivered on a monthly basis. Once a build is delivered, staff has one week to test the PIR resolutions. After testing, a decision is made to accept or reject the build. Accepted builds are deployed to production on a Sunday night.

Mr. Marshall discussed that work was continuing on producing member annual statements (MAS) for 2014. When the MAS process is complete, the statements will be available for members on Member Self-Service. TCRS will notify employers when the statements are available for members to review so that the employers can inform their employees.

Mr. Marshall next discussed that Employer Reporting continues to improve each month, with fewer errors and less inquiries by the employer to complete the process. Mr. Marshall indicated that staff has completed the design work for the State and Teacher Hybrid plan. These designs will be used by Deloitte to develop the code to process retirement benefits and service purchase requests under the Hybrid Plan.

Employer Reporting

Mr. Wayman provided an update on the employer reporting process. Mr. Wayman indicated that employers have been reporting through Concord for five months and improvement in the process has been made. Mr. Wayman indicated that reports are due by the 10th of the following month. For the November 2014 reporting period, 98.2% of the employers had completed the reporting process by the deadline of December 10.

Operations Update

Mr. Wayman next provided an update on TCRS operations since the launch of Concord. TCRS is still experiencing a large volume of incoming retirement applications. Since the last meeting in September, TCRS has reduced the backlog of outstanding retirement applications from approximately 1,600 to 1,200. Sixty percent of the retirement applications to be worked have a future date of retirement. TCRS is working diligently to process the retirement applications in a timely manner by prioritizing the applications based on the date of retirement and the date of receipt. Retired payroll and refunds are being processed timely. Mr. Wayman also mentioned a backlog of service purchase requests.

GASB Update

Mr. Wayman reminded the committee that the Governmental Accounting Standards Board (GASB) has issued new accounting standards, Statements 67 and 68. These new standards govern how pension plans are reported by the plan sponsor and participating employers. GASB Statement 67 outlines the disclosures and schedules required to be presented by the pension plan. This statement was effective for the year ended June 30, 2014. GASB Statement 68 outlines what an employer participating in TCRS must present in their financial statements and the statement is effective for years ending June 30, 2015. TCRS plans to provide the required information to employers by March 2015.

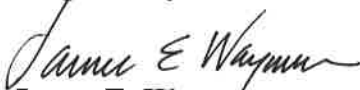
Political Subdivision Participation

Mr. Wayman introduced Ms. Melissa Davis, Supervisor of Employer Services, to provide an update about employer participation in TCRS. Ms. Davis presented information regarding the Town of Vanleer and the Russellville Whitesburg Utility District. Ms. Davis indicated the Town of Vanleer is petitioning for membership in the Alternate Defined Benefit plan with a 1.4% accrual factor and higher retirement eligibility criteria. The Russellville Whitesburg Utility District is petitioning for membership in the Legacy Defined Benefit plan. The administrative committee gave a unanimous recommendation to the Board that the Town of Vanleer and the Russellville Whitesburg Utility District be approved for participation in TCRS.

Adjournment

With no other business, the Administrative Committee of the Board of Trustees adjourned at 9:50 a.m. on December 12, 2014.

Respectfully Submitted,



James E. Wayman
Assistant Director, TCRS

Approved:

Jill Bachus
Administrative Committee Chair

**AUDIT COMMITTEE MEETING MINUTES
OF TENNESSEE CONSOLIDATED RETIREMENT SYSTEM (TCRS)
December 12, 2014**

The Audit Committee of the Board of Trustees of the Tennessee Consolidated Retirement System met on Friday, December 12, 2014, at 8:00 a.m. The meeting was held in the Legislative Plaza, Room LP 30 with Chairman Michael Barker presiding.

The following members were present: Chairman Michael Barker; Mayor Ken Wilber, Tennessee Municipal League; Commissioner Rebecca Hunter, Tennessee Department of Human Resources.

Others present were: Mr. David Lillard, Jr., State Treasurer; Charles Archer, Unconfirmed TCRS Audit Committee Member, Department of Revenue; Mr. Andy Furlong, Director of Internal Audit, Department of Treasury; Mr. Jamie Wayman, Assistant Director of TCRS; Britt Wood, Internal Auditor, Department of Treasury; Ms. Suzanne Smotherman, Internal Auditor, Department of Treasury; and Mr. Andy McArthur, Internal Auditor, Department of Treasury.

Call Meeting to Order

Chairman Barker called the meeting to order. Unable to recognize a quorum, Chairman Barker asked if there were questions about the minutes of the prior meeting. No questions were raised by those present. Chairman Barker stated that the Committee would abstain from approving the minutes until a quorum was present.

Auditing the Concord System

Britt Wood discussed the plans and procedures to perform auditing test work using Audit Command Language (ACL) software and Audit Exchange (AX) software for the Concord system. Ms. Wood will be developing tests in consultation with other Treasury Internal Auditors utilizing AX as a means of conducting continuous audit tests. Ms. Wood reviewed some of the tests that have been developed to provide an example of the capabilities available within ACL and AX.

Approval of Minutes from September 26, 2014 Meeting

Chairman Barker recognized a quorum with the arrival of Commissioner Hunter. Chairman Barker asked if there were any recommended changes to the September 26, 2014 Audit Committee meeting minutes. There were no changes or additions recommended. Mayor Wilber made a motion to accept the minutes. Commissioner Hunter seconded the motion. The minutes were unanimously approved.

Concord Update

Mr. Wayman delivered the Concord update in the absence of Ms. Jill Bachus. Mr. Wayman stated that Concord has been live for six months. The implementation team is still working through problem incident reports (PIRs), but the system is operating as intended thus far. Mr. Wayman stated that PIRs are addressed by the Deloitte team assigned to Concord. The Deloitte team will review the PIR, develop a solution in a test environment, and implement the solution in the live Concord environment when appropriate. PIRs are closed when the problem is deemed to be corrected in the live Concord environment.

Mr. Wayman stated that TCRS staff have completed the preparation of about half of the member annual statements. The second half of the member annual statements will be produced over the upcoming weekend. The preparation of member annual statements requires an excessive amount of the system's resources. Therefore, it is best to prepare the statements when the system is not in use by the staff. Active members will be notified that their annual statements are available in Concord Self Service.

Mr. Wayman mentioned that Deloitte is obligated under contract to correct issues with the new Concord system that are identified in both the User Acceptance Testing (UAT) environment and the live environment. Treasurer Lillard mentioned that the legislation necessary for funding the development of Concord will expire at the June 30, 2016 fiscal year end.

Discuss Private Equity Disclosure

Chairman Barker mentioned the Private Equity Disclosure included in the meeting materials. The Investments Division is required to disclose any contact with those seeking private equity financing. The Board did not find any further discussion about the disclosures necessary.

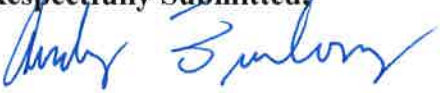
Other Business

Chairman Barker opened the floor for other business not included in the meeting material. Treasurer Lillard expressed appreciation for the efforts of Ms. Wood, Ms. Smotherman, and Mr. Rector in automating the Concord audit and test work. Treasurer Lillard stated that the complexity of the Concord system coupled with the complexity of members being involved in multiple retirement plans requires advanced auditing and review techniques to ensure efficiency and accuracy in the Concord system.

Adjournment

Chairman Barker stated that if there were no additional items to be discussed, the meeting could be adjourned. Commissioner Hunter made a motion to adjourn the meeting. The motion was properly seconded by Mayor Wilber. The Committee unanimously voted to adjourn the meeting.

Respectfully Submitted,



Andy Furlong
Director of Internal Audit

Approved:

Michael Barker
Chairman of the Audit Committee

Minutes of the Meeting of the Investment Committee of the TCRS Board of Trustees
December 12, 2014

The Investment Committee ("Investment Committee") of the Tennessee Consolidated Retirement System ("TCRS") Board of Trustees met at 9:00 a.m. on December 12, 2014 in Room 31 of Legislative Plaza. The Honorable David H. Lillard, Jr., State Treasurer, called the meeting to order at 9:00 a.m. Investment Committee members in attendance included Treasurer Lillard; Mr. Bill Kemp, Sumner County Clerk; and Mr. Bob Wormsley, Local Government Insurance Pool. Additional attendees included Bill Abney, Assistant to the Treasurer for Investments; Michael Brakebill, Chief Investment Officer; Andrew Palmer, Deputy Chief Investment Officer; JP Rachmaninoff, Director of Real Estate; Matthew Haitas, Real Estate Analyst; Grant Leslie, Senior Portfolio Manager; Derrick Dagnan, Senior Portfolio Manager; Carrie Green, Senior Portfolio Manager; Daniel Crews, Director of Private Equity; Michael Keeler, Director of Equities; Rhonda Myers; Keith Boring, Director of Policy & Research; Richard Newton, F&A Division of Budget; Michael Barker, TCRS Board of Trustees; Shelli King, Communications Director, Treasurer's Office; and Patrick Thomas, Strategic Investment Solutions.

Treasurer Lillard opened the meeting by seeking approval for the minutes from the Investment Committee meetings on September 26, 2014 and October 27, 2014. On a motion by Treasurer Lillard seconded by Mr. Wormsley, the aforementioned minutes were unanimously approved.

Mr. Crews then provided a review of the private equity program. The discussion covered a historical timeline of the private equity program, the strategic goals of the program, an overview of the private equity team, a review of the management and oversight of the program, private equity portfolio projections, a review of the current portfolio positioning, and an assessment of performance over both the trailing year and since inception.

Treasurer Lillard acknowledged the private equity team for their noteworthy efforts in managing the program and addressed the initiative to institute CRM / portfolio management software to enhance TCRS staff's ability to manage programs in private equity, real estate, and strategic lending.

Mr. Rachmaninoff then provided a strategic overview of the real estate program. First, the following strategic goals of the program were noted: diversify the TCRS portfolio, provide competitive risk adjusted returns and an inflation hedge, and exploit inefficiencies in the real estate markets. Second, a timeline covering the history of the real estate program was provided. Third, the current weighting of real estate (at 6% of the portfolio) and the projected growth of real estate within the portfolio were addressed. Fourth, property type weightings were discussed. Fifth, the current weighting to core and non-core assets was addressed, with expectations that the current 5% weighting to non-core assets is likely to increase to the midpoint of the target range by 2019. Sixth, additional detail on the non-core portfolio positioning and goals were highlighted. Notably, the non-core portfolio is enabling exposure to segments of the market that have been difficult to access via core strategies and has provided strong performance relative to core assets over the last several quarters. Finally, a review of

performance noted outperformance of 69% of peers over the past ten years and a trailing one-year return that exceeded the benchmark by 54 basis points.

Mr. Rachmaninoff then proceeded to present the proposed investment in PNC Dupont Circle, a Washington, D.C. urban retail property in the Dupont Circle neighborhood. The strength of the location and proximity to transit, the long-term lease of anchor tenant PNC Bank, the roster of additional tenants, and the proposed debt financing were all addressed. Upon a motion by Mr. Wormsley seconded by Mr. Kemp, the proposed investment was unanimously approved.

Mr. Rachmaninoff proceeded to address the proposed investment in TIAA-CREF US Super Regional Mall Fund, L.P. Mr. Rachmaninoff noted the absence of exposure to regional malls in the portfolio, largely due to the large purchase price of such assets and the diversification limitations of the portfolio. The fund is an open-ended vehicle likely to comprise a limited number of investors to access high quality regional malls. The fund sponsor's sizable investments in the space as both an equity investor and lender were noted. The rationale for targeting high quality regional malls was also addressed, with the predominant factors as follows: recovery of retail sales, opportunity for significant rent growth, very limited new supply, significant barriers to entry, and the value proposition of a service experience not available via e-commerce. Upon a motion by Chairman Lillard seconded by Mr. Kemp, the proposed investment was unanimously approved.

Mr. Rachmaninoff then introduced Mr. Haitas to discuss the proposed investment in CBRE Strategic Partners US Value Fund 7, LP, a value-added, closed-end real estate commingled fund. The fund will invest predominantly in office (expected to be 60 – 70% of the portfolio) and multifamily (expected to be 30 – 35%) properties with the possibility of investing in retail, industrial, and hotel properties. The fund sponsor's status as a vertically integrated manager was highlighted, as was its affiliation with CBRE, a large services provider that provides selected competitive advantages to the fund sponsor. The strength of the management team, the track record, and terms were all addressed. Upon a motion by Chairman Lillard seconded by Mr. Kemp, the proposed investment was unanimously approved.

Mr. Dagnan then proceeded to address the proposed investment in Orbimed Royalty Opportunities II. First noted was the strength of the sponsor in the healthcare arena, given substantial assets under management in hedge fund, private equity, and royalty investment strategies. Second, Mr. Dagnan provided insight into both the traditional and structured healthcare royalty strategies. Third, the appeal of the proposed royalty investment strategy within the strategic lending portfolio was addressed, most notably the lack of correlation to corporate credit risk. Noteworthy risks related to the strategy were also highlighted, with the duration of the underlying assets and increasing competition in the field addressed. Upon a motion by Chairman Lillard seconded by Mr. Wormsley, the proposed investment was unanimously approved.

Treasurer Lillard subsequently adjourned the meeting at 10:05 a.m.

Respectfully submitted,



Michael Brakebill
Chief Investment Officer

APPROVED:

David H. Lillard, Jr. Chairman
TCRS Board of Trustees

**Minutes of the Meeting of the Investment Committee of the TCRS Board of Trustees
February 10, 2015**

The Investment Committee ("Investment Committee") of the Tennessee Consolidated Retirement System ("TCRS") Board of Trustees met at 2:00 p.m. on February 10, 2015 in Room G-11 on the ground floor of the State Capitol. The Honorable David H. Lillard, Jr., State Treasurer, called the meeting to order at 2:00 p.m. Investment Committee members in attendance included Treasurer Lillard; Mr. Bill Kemp, Sumner County Clerk; Mr. Bob Wormsley, Local Government Insurance Pool; and Comptroller Justin Wilson (non-voting). Additional attendees included Michael Brakebill, Chief Investment Officer; Andrew Palmer, Deputy Chief Investment Officer; JP Rachmaninoff, Director of Real Estate; Matthew Haitas, Real Estate Analyst; Grant Leslie, Senior Portfolio Manager; Derrick Dagnan, Senior Portfolio Manager; Daniel Crews, Director of Private Equity; Keith Boring, Director of Policy & Research; Richard Newton, F&A Division of Budget; Shelli King, Communications Director, Treasurer's Office; and Jennifer Selliers, Compliance Officer.

Treasurer Lillard opened the meeting by asking Mr. Crews to address the proposed private equity investments.

Mr. Crews began with a presentation on venture capital investing and TCRS' strategy for investing therein. Addressed in the presentation were the target allocation of venture capital within the TCRS private equity program, the wide dispersion of returns across venture capital firms, the persistence of relative returns by venture capital managers compared to other venture capital managers, an analysis of venture capital fund terms and performance, the landscape of prospective venture capital managers, and the performance of the TCRS venture capital portfolio to date. Comptroller Wilson inquired into the analysis of venture capital fund terms and performance and noteworthy differences with traditional managers. Mr. Crews then asked Mr. Leslie to present the proposed investment in Fairview Volunteer State Special Purpose Fund, L.P.

Mr. Leslie opened by noting that the manager represents an existing relationship for TCRS in the venture capital portfolio. He reported that staff considered the depth of the senior management team, the noteworthy length and strength of the historical track record, the proven investment strategy, and the geographic scope of the fund's investment strategy. One noteworthy concern expressed was currently elevated valuations in later stage venture backed companies. Upon request by Treasurer Lillard, Messrs. Crews and Leslie discussed the role of Fairview in accessing the manager given the manager had previously been accessed via a partnership with TrueBridge Capital Partners. With a motion by Mr. Kemp seconded by Mr. Wormsley, the proposed investment in Fairview Volunteer State Special Purpose Fund, L.P. was unanimously approved.

Mr. Crews then proceeded to present proposed investments in OCM Opportunities X and Xb. Highlighted in the discussion were OCM's role as an existing manager, the firm's strong history and reputation in distressed credit, and the role of distressed credit within the private equity

portfolio. Noteworthy strengths of the offerings included strong leadership, a broad, global mandate, good historical discipline, and a strong track record. Concerns included potential pressure from shareholders to raise excessive amounts of capital given the manager's status as a publicly traded firm. Mr. Wormsley inquired into governance related matters for the fund, and both Messrs. Crews and Brakebill addressed the inquiry. Upon a motion by Treasurer Lillard seconded by Mr. Kemp, the proposed investments in OCM Opportunities X and Xb were approved.

Treasurer Lillard then asked Mr. Rachmaninoff to present the proposed investment in 62 Avenue B.

Mr. Rachmaninoff began by describing the property as an 81-unit multifamily property in the East Village neighborhood of Manhattan in New York City. While the property was originally constructed in 1970, redevelopment in 2013 resulted in a high quality multifamily asset. On top of the quality of the asset, other strengths included the attractiveness of the location, the absence of any rent regulation, and the direct exposure to the New York City market. Upon request by Treasurer Lillard, Mr. Rachmaninoff addressed the proposed loan structure and the potential benefits thereof. With a motion by Mr. Wormsley seconded by Mr. Kemp, the proposed investment in 62 Avenue B was unanimously approved.

Treasurer Lillard then requested that Mr. Palmer address developments in strategic lending.

Mr. Palmer first discussed developments within the more liquid portion of the strategic lending program. When initiated, several manager relationships were designed, with approval of the Treasurer and subsequent disclosure to the Investment Committee, to flex up if market conditions presented more attractive investment prospects. Given the downturn in the high yield markets in the fall, allocations to Beachpoint Capital Management and Brigade Capital Management were increased by \$50 million each at the end of 2014. While only half the increased allocation has been deployed to date, results since the increased allocation have been positive. Next, Mr. Palmer provided an update on the strategic lending portfolio as a whole, highlighting underlying strategies, manager diversification, and the goals of the program. Mr. Palmer then requested that Mr. Dagnan present the proposed investment in ICG Europe Fund VI.

Mr. Dagnan began by introducing ICG as a successful firm with a long history of success in the European market. Thereafter, a brief discussion on the investment strategy of the fund, the firm's resources across national markets within Europe, and current market dynamics ensued. Particular strengths of the proposed investment included strong alignment of interest, off-market sourcing abilities, ability to structure investments flexibly across jurisdictions, and the remarkable track record. Mr. Kemp inquired both into the security underlying the proposed investment as well as into potential risks associated with current developments in Greece. Upon a motion by Treasurer Lillard seconded by Mr. Kemp, the proposed investment in ICG Europe Fund VI was unanimously approved.

Treasurer Lillard then asked Mr. Brakebill to provide a brief update on the TCRS portfolio. First addressed was a rebalancing of the portfolio designed to reduce an underweight to both developed international and emerging market equities. Second, given projected calendar year-end returns for 2014, Mr. Brakebill highlighted the relative strength of TCRS' returns to peers. Treasurer Lillard subsequently adjourned the meeting at 3:10 p.m.

Respectfully submitted,



Michael Brakebill
Chief Investment Officer

APPROVED:

David H. Lillard, Jr. Chairman
TCRS Board of Trustees

INVESTMENT POLICY



STATE OF TENNESSEE
TENNESSEE CONSOLIDATED RETIREMENT SYSTEM
15th FLOOR ANDREW JACKSON BUILDING
502 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0201

DAVID H. LILLARD, JR.
STATE TREASURER

JILL BACHUS
DIRECTOR

Memorandum

To: TCRS Board of Trustees
From: Jill Bachus *JB*
Date: March 18, 2015
Subject: Investment Policy Changes

Attached is a summary of proposed changes to the TCRS investment policy as well as a "marked-up" version of the entire investment policy. Basically the changes to the policy fall into two categories:

- Overall formatting of the policy, including a glossary of definitions. This type of formatting is typical of investment policies found with our peers.
- Changes related to state and federal securities regulations.

This information will be discussed at the Board meeting.

Topic	Material	Comments	Current Policy Reference	Proposed Policy Reference
Format		The proposed Investment Policy is more succinct and contains a table of contents and defined terms, modeling some of the formats and standards used by other public funds.	Throughout	Throughout
Overview and Authority		Includes the updated fiduciary standard, reflecting the 2014 legislative changes to T.C.A. §8-37-104 and a scope to broadly address the Investment Policy's applicability to other fiduciaries of the TCRS.	Pg. 1, Para. 2 – 3 Pg. 1, Treasurer Pg. 2, Investment Staff Pg. 10, Para. 1	Pgs. 7 – 8, Sec. II.A. – D.
Objective		Outlines how the Investment Policy supports the TCRS's primary investment objective.	N/A	Pg. 8, Sec. III.
Roles and Responsibilities	X	Centralizes the duties and responsibilities of various individuals and groups and reflects the 2014 legislative changes to T.C.A. §8-37-109 (Investment Advisory Council) and T.C.A. §8-34-323 (Investment Committee). Increases the dollar threshold at which the Investment Committee must approve a private equity, real estate or strategic lending investment from \$30 million to \$75 million.	Pgs. 1 – 4 Pgs. 17 – 18	Pgs. 8 – 11, Sec. IV.
Governing Principles		Consolidates the predominant investment standards and harmonizes the primary investment objective with current investment directives.	Pg. 6, Key Objective Pg. 6, Investment Return Pg. 6, Liquidity for System Beneficiary Payment Pg. 7, Asset Allocation Pg. 7 – 8, Performance Measurement	Pgs. 11 – 12, Sec. V.
Additional Investment Criteria		Generally, reflects revisions necessary because of the 2014 legislative changes to T.C.A. §8-37-104 and changes to the federal securities laws, rules and regulations.	Pgs. 10 – 22, Investment Criteria	Pgs. 13 – 19, Sec. VI.

(cont.)

Topic	Material	Comments	Current Policy Reference	Proposed Policy Reference
Additional Investment Criteria - Equity		Revised to align with federal securities laws.	Pg. 10, Common, Preferred Stock and Convertible Bonds Pg. 11, Private Placements Amendment One, Exchange Traded Funds	Pg. 13, Sec. VI.A.
Additional Investment Criteria – Fixed Income		Amended to align with federal securities laws and the Treasury Market Practices Group (“TMPG”) recommended practices.	Pg. 10, Notes, Bonds, and Mortgages Pg. 11, Private Placements Amendment One, Exchange Traded Funds	Pg. 13, Sec. VI.B.
Additional Investment Criteria – Private Equity		Streamlined to directly address those elements as required within T.C.A. §8-37-104.	Pgs. 19 – 22, Private Equity	Pgs. 13 – 16, Sec. VI.C.
Additional Investment Criteria – Real Estate	X	Modernized to eliminate subjective, qualitative criteria and updated to include “Direct Investments,” “Commingled Investments,” and “Core Investments.” Decreased exposure to “Core Investments,” in turn granting authority to increase exposure to “Non-Core Investments.”	Pg. 16, Real Estate	Pg. 16, Sec. VI.D.
Additional Investment Criteria – Cash and Cash Equivalents		Updated to distinguish between “Cash Equivalents” and “Short-Term Investments” (i.e. ratings and maturity). Removed watch list criteria, eliminated credit analysis requirement and clarified “business day.”	Pg. 13, Short-term Investments	Pgs. 16 – 17, Sec. VI.E.
Additional Investment Criteria – Canadian Investments		Refashioned language to conform to global changes.	Pg. 15, Canadian Investments	Pg. 17, Sec. VI.F.

(cont.)

Topic	Material	Comments	Current Policy Reference	Proposed Policy Reference
Additional Investment Criteria – International Securities	X	Modified language to correspond to global changes. Clarified how a security's country classification status will be determined in order to comply with T.C.A. §8-37-104(a)(3).	Pg. 15, International Investments	Pg. 17, Sec. VI.G.
Additional Investment Criteria – Canadian and International Currency	X	Amended to directly align with federal securities changes made pursuant to Section 731 of Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act") and to support portfolio risk mitigation techniques.	Pg. 15, Foreign Currency Hedging	Pg. 18, Sec. VI.H.
Additional Investment Criteria – Derivative Instruments	X	Revised to address those elements as required within T.C.A. §8-37-104, align with federal securities changes made pursuant to the Dodd-Frank Act and to support portfolio risk mitigation techniques.	Pg.11, Stock Options Pgs. 11 - 12, Fixed Income Financial Instruments Pg. 12, Equity Futures Pg. 15, Foreign Currency Hedging	Pg. 18, Sec. VI.I.
Additional Investment Criteria – Securities Lending		Reformed to follow global changes.	Pgs. 13 – 14, Securities Lending	Pgs. 18 – 19, Sec. VI.J.
Additional Investment Criteria – Standby Note Purchaser		Reorganized to coincide to global changes.	Pg. 14, Standby Note Purchase Agreement	Pg. 19, Sec. VI.K.
Risk Management – Rebalancing and Transitioning		Adjusted to support portfolio risk mitigation techniques and allow greater flexibility during strategic shifts.	Pg. 8, Rebalancing	Pg. 19, Sec. VII.A.

(cont.)

Topic	Material	Comments	Current Policy Reference	Proposed Policy Reference
Risk Management – Percentage Limitations		No notable change.	Pg. 10, Para. 2	Pg. 20, Sec. VII.B.
Risk Management – Designated Nationally Recognized Statistical Rating Organizations (“NRSROs”)		Included to align with federal securities changes pursuant to the Dodd-Frank Act.	N/A	Pg. 20, Sec. VII.C.
Risk Management – Trading, Brokerage and Research		Modernized to eliminate subjective, qualitative language and updated to address selection processes.	Pg. 3, Brokerage Firms Pg. 5, Commission Dollar Arrangements	Pg. 20, Sec. VII.D.
Risk Management – Service Providers	X	Modified to delegate the authority to procure services necessary and in the best interest of the TCRS to the State Treasurer. The procurement method will also be at the State Treasurer’s discretion.	Pgs. 3 – 4, Consultants Pg. 4, External Managers and Advisors Pg. 3, Consultants Pg. 4, Master Custodian	Pg. 20, Sec. VII.E.
Risk Management – Legal, Compliance and Audit		Amended to correlate to departmental and operational changes within the Department of Treasury.	Pg. 1, Legal Counsel Pg. 3, Internal Controls	Pg. 21, Sec. VII.F.

(cont.)

Topic	Material	Comments	Current Policy Reference	Proposed Policy Reference
Risk Management – Investment Guidelines, Policies and Procedures		Streamlined to clarify the requirements of and references to other written guidelines, policies and procedures related to investing the TCRS's assets.	Pg. 2, Investment Staff Pg. 4, Proxy Voting Pg. 5, Commission Dollar Arrangements Pgs. 13 – 14, Securities Lending Pg. 16, Real Estate Pg. 17, Private Equity	Pg. 21, Sec. VII.G.
Monitoring and Reporting		Centralized monitoring and reporting requirements.	Pg. 3, Reporting	Pg. 21 – 22, Sec. VIII.
Policy Interpretation	X	Appended to grant the Treasurer explicit authority to take all actions necessary to comply with federal and state securities laws, rules and regulations and provide interpretive guidance and approve variances, if necessary.	N/A	Pgs. 22 – 23, Sec. IX.
Approval and Adoption		No notable change.	Pg. 22	Pg. 23, Sec. X.

THE TENNESSEE CONSOLIDATED RETIREMENT SYSTEM

INVESTMENT POLICY

REVISED AND RESTATED

Table of Contents

I. Definitions	3
II. Overview and Authority	7
A. Introduction.....	7
B. Investment Authority.....	7
C. Fiduciary Standard	7
D. Scope	8
III. Objective.....	8
IV. Roles and Responsibilities	8
A. Board of Trustees	8
B. Investment Advisory Council.....	9
C. Investment Committee	9
D. State Treasurer.....	9
E. Chief Investment Officer.....	9
F. Investment Staff	10
G. General Consultant	10
V. Governing Principles	11
A. Primary Investment Objective.....	11
B. Authorized Asset Classes and Investment Activities.....	11
C. General Asset Allocation	11
D. Benchmarks	12
VI. Additional Investment Criteria.....	13
A. Equity.....	13
B. Fixed Income Securities and Short-Term Securities.....	13
C. Private Equity.....	13
D. Real Estate	16
E. Cash and Cash Equivalents.....	16
F. Canadian Securities.....	17
G. International Securities.....	17
H. Canadian and International Currency.....	18
I. Derivative Instruments.....	18
J. Securities Lending.....	18
K. Standby Note Purchaser.....	19
VII. Risk Management.....	19
A. Rebalancing and Transitioning.....	19
B. Percentage Limitations.....	20
C. Designated Nationally Recognized Statistical Rating Organizations (“NRSROs”).....	20
D. Trading, Brokerage and Research.....	20
E. Service Providers.....	20
F. Legal, Compliance and Audit	21
G. Investment Guidelines, Policies and Procedures.....	21
VIII. Monitoring and Reporting	21
A. Quarterly	21
B. Periodically	22
C. Annually.....	22
IX. Policy Interpretation	22
X. Approval and Adoption	23

I. Definitions

The following definitions are used hereafter with respect to this Investment Policy:

Aggregate Book Value – *see Market Value.*

Board – The Board of Trustees of the TCRS.

Book Value – *see Market Value.*

Buyout – Generally a type of traditional private equity investment that invests in the purchase of all or part of the stock or assets of a privately or publicly owned company through the use of debt and equity.

Cash Equivalents – Debt investments representing highly rated, highly liquid and readily marketable securities with a remaining term to maturity (at the time of purchase) of ninety days or less (≤ 90 days), including, but not limited to, commercial paper and discount notes. Debt securities issued by the United States, any agency of the United States federal government or any entity with the express or implied backing of the United States with a remaining term to maturity of three hundred ninety-seven days or less (≤ 397 days) may also be considered Cash Equivalents for purposes of this Investment Policy.

Chief Investment Officer (“CIO”) – The Department of Treasury employee responsible for the investment and oversight of the TCRS assets in accordance with statutory guidelines and the investment policies and strategies established by the Board.

Commingled Investment – A pooled investment vehicle that is overseen by an External Investment Manager. The following types of pooled investment vehicles used for real estate investments may include, but are not limited to: open and closed end funds; private limited partnerships; private limited liability companies; private and public Real Estate Investment Trusts (“REITs”); and group trusts. The TCRS may also participate in secondary offerings or purchase fund interests from other investors in the secondary market.

Core Investments – An industry term that generally means a Traditional Property Type that is well-located, of institutional quality and leased, at the time of acquisition, at a rate of eighty percent or greater ($\geq 80\%$). “Core plus,” as defined by the general real estate industry, may also be considered a Core Investment for purposes of this Investment Policy.

Derivative Instruments – Any agreement, option or instrument, or any series or combinations of an agreement, option or instrument: (i) to make or take delivery of, or assume or relinquish, a specified amount of one (1) or more underlying interests, or to make a cash settlement in lieu thereof; or (ii) that has a price, performance, value or cash flow based primarily upon the actual or expected price, yield, level, performance, value or cash flow of one (1) or more underlying interests. Derivative Instruments include, but are not limited to, options, warrants (not attached to another investment), caps, floors, collars, swaps, security-based swaps, security-based swap agreements, mixed swaps, swaptions, forwards, futures and any other agreements, options or instruments substantially similar thereto, or any series or combinations thereof. Derivative Instruments do not include Collateralized Mortgage Obligations (“CMOs”), Treasury Inflation-

Protected Securities (“TIPS”), other asset-backed securities, principal-protected structured securities or floating rate securities.

Direct Investment – A direct ownership or co-ownership in Core Investments or Non-Core Investments (real estate).

Direct Lending – The transfer of funds from the ultimate lender to the ultimate borrower, most often through a third (administrative) party.

Distressed – Generally a type of traditional private equity investment that invests in the debt obligations of under-performing companies in need of operating or financial restructuring and that are typically involved in a turnaround, restructuring, deleveraging or bankruptcy situation.

Distressed Debt – A debt instrument issued by a company that is typically involved in a turnaround, restructuring, deleveraging or bankruptcy situation.

Emerging Market Debt – A debt instrument issued by nations or companies that are in the process of rapid growth and industrialization. Emerging Market Debt is subject to the same screening methodology discussed within this Investment Policy (Section VI.G).

Equity(ies) – Investments representing an equity, ownership interest to include, but not limited to, publicly traded common and preferred stock, Initial Public Offerings (“IPOs”), bonds or any security convertible to stock, equity Exchange Traded Funds (“equity ETFs”), publicly traded Real Estate Investment Trusts (“REITs”) and equity Restricted Securities.

External Investment Adviser – An individual or entity duly selected and contractually bound, who/that typically provides asset management services on a non-discretionary basis to the TCRS. Such External Investment Adviser will be appropriately registered, or exempt from registration, under the applicable state and federal securities laws, rules and regulations.

External Investment Manager – An individual or entity, duly selected and contractually bound, who/that typically assumes discretion over a specified portion of the TCRS’s assets. Such External Investment Manager will be appropriately registered, or exempt from registration, under the applicable state and federal securities laws, rules and regulations.

Fixed Income Security(ies) – Investments representing an instrument under which the issuer owes the holder (debt) to include, but not limited to, notes, bonds or other fixed income securities exceeding one year (> 1) in maturity, Mortgage-Backed Securities (“MBS”), Asset-Backed Securities (“ABS”), Collateralized Mortgage Obligations (“CMO”), Commercial Mortgage Backed Securities (“CMBS”), Medium Term Notes (“MTN”), municipal securities, corporate securities, bond Exchange Traded Funds (“bond ETFs”) and debt Restricted Securities.

General Consultant – An entity or individual, duly selected and contractually bound, with substantial experience in providing advice on and/or consulting services related to the Total Assets based upon its/his/her expertise and analysis of the issues and/or assets under consideration.

Growth Equity – Generally a type of traditional private equity investment that invests in an established company for the purpose of growing its business.

Hedging Transaction – A derivative transaction that is entered into and maintained to manage: (i) the risk of a change in the value, yield, price, cash flow or quantity of assets or liabilities, or a portfolio of assets and/or liabilities; or (ii) the currency exchange rate risk related to assets or liabilities, or a portfolio of assets and/or liabilities.

High Yield Bonds – A debt instrument with a credit rating below Investment Grade.

Income Generation Transaction – A derivative transaction, excluding Hedging Transactions and Replication Transactions, which is entered into to generate income.

Internal Legal Counsel – The Assistant Treasurer for Legal, Compliance and Audit or his/her authorized designee(s) who represent the Department of Treasury.

Investment Advisory Council (“IAC”) – A council consisting of at least five (5) persons, duly qualified and selected, which will review information furnished to it and provide such investment advice to the State Treasurer and Chief Investment Officer as the Investment Advisory Council deems appropriate.

Investment Committee – A committee of the Board comprised of Board members that will assist the Board in fulfilling its responsibilities with respect to the investments of the TCRS.

Investment Grade – Rating description given to debt securities. For purposes of this Investment Policy, Investment Grade for long-term debt securities must be within the four (4) highest tiers (e.g., AAA, AA, A, or BBB) and short-term debt securities must be within the three (3) highest tiers (e.g., A-1, A-2 or A-3); rating modifiers (+, -) should not be considered when determining the tiers. Debt securities issued by the United States, any agency of the United States federal government or any entity with the express or implied backing of the United States shall be considered as holding the highest possible rating.

Investment Guidelines – Policies and procedures that provide operational framework for implementing and monitoring various investment strategies and activities. Investment Guidelines are often drafted by Investment Staff and must be recommended by the Chief Investment Officer and approved by the State Treasurer before becoming effective.

Investment Staff – Each Department of Treasury, Investment Division employee involved in the investment management of the Total Assets.

Legal Advisor – The Attorney General and Reporter or his/her authorized designee(s) who represent the Board in all matters.

Levered and Unlevered Loans – A debt instrument from companies with below Investment Grade credit ratings. Leveraged loans are typically secured with a lien on the company's assets and are generally senior to the company's other debt.

Market Value – Aggregate Book Value, Book Value and Market Value are determined in accordance with applicable financial reporting requirements. For additional guidance, refer to the TCRS's Comprehensive Annual Financial Report.

Master Custodian – A bank, savings and loan association or trust company, duly selected and contractually bound, that, at a minimum, holds the assets of and processes securities transactions for the State of Tennessee, Department of Treasury on behalf of the TCRS.

Mezzanine Debt – Placed between debt and equity in a company's capital structure, mezzanine debt is typically a subordinated debt instrument for late-stage venture and mature companies and offers income through a current coupon and equity participation through a warrant.

Non-Core Investments – Broadly defined as all other real estate assets that are not Core Investments. Non-Core Investments include “value-added,” “opportunistic,” “build to core” or “lease to core” investments, as defined by the general real estate industry.

Outside Legal Counsel – Attorney(s) or law firm(s), duly selected and contractually bound, who/that provide legal advice to the TCRS or the Department of Treasury for or on behalf of the TCRS.

Other Opportunities – Generally a type of private equity investment that is designed to capture innovative investment opportunities created by the marketplace that do not fit an existing category.

Real Estate Debt – A debt instrument that is secured by the collateral of specified real estate property.

Replication Transaction – A derivative transaction or combination of derivative transactions, excluding Hedging Transactions, affected either separately or in conjunction with cash market investments included in a portfolio in order to replicate the risks and returns of another authorized transaction, investment or instrument and/or operate as a substitute for cash market transactions.

Resource – Generally a type of traditional private equity investment that invests in commodities or natural resources.

Restricted Securities – Has the same meaning as set forth in Rule 144(a)(3) promulgated under the Securities Act of 1933.

Service Providers – Any external party who/that performs investment-related services for or on behalf of the TCRS, including, but not limited to, the General Consultant, External Investment Advisers, External Investment Managers, Outside Legal Counsel, investment consultants, data providers, data aggregators, securities litigation monitors, etc.

Short-Term Security(ies) – Debt investments representing highly rated, highly liquid and readily marketable securities with a remaining term to maturity (at the time of purchase) of three hundred sixty days or less (≤ 360 days), including, but not limited to, commercial paper, discount notes and short-term United States agency debt.

Structured Credit – Products comprised of tranches of portfolios of credit instruments or exposures, including credit derivatives, usually securitized by various financial assets.

T.C.A. – Tennessee Code Annotated.

TCRS – Tennessee Consolidated Retirement System, which may also be referred to under state law as “retirement system.”

Total Assets – The total plan assets or overall investment portfolio of the TCRS.

Traditional Property Type – Real estate that consists of only office, multifamily (apartment), retail and/or industrial assets.

Venture Capital – Generally a type of traditional private equity investment that invests in the financing of rapidly-growing companies that do not have access to public equity or debt financing.

II. Overview and Authority

A. Introduction

The Tennessee Consolidated Retirement System was established by the General Assembly as of July 1, 1972 for the purpose of providing retirement and other benefits for state employees, teachers, higher education employees, local government employees and employees of other entities authorized to participate.

B. Investment Authority

General administration and responsibility for the proper operation of the TCRS are vested with the TCRS Board of Trustees (“Board”), including the authority for investing and reinvesting the assets of the TCRS. The State Treasurer, a constitutional officer, is the custodian of the funds of the TCRS. The day-to-day administration and operation of the TCRS are primarily delegated to the State Treasurer.

Implementation of the TCRS Investment Policy established by the Board is hereby delegated to the State Treasurer, who shall put such policy into effect. In implementing this Investment Policy, the State Treasurer hereby delegates certain responsibilities to the Chief Investment Officer and Investment Staff, including the power to invest and reinvest the TCRS’s assets in accordance with the criteria established by this Investment Policy.

The Chief Investment Officer with the approval of the State Treasurer may, through written Investment Guidelines, provide additional investment criteria or guidance.

C. Fiduciary Standard

All assets of the TCRS shall be invested and managed solely in the interest of the TCRS’s beneficiaries and in a manner consistent with T.C.A. §35-14-107, the prudent investor rule pursuant to T.C.A. §35-14-103 and the standard of care pursuant to T.C.A. §35-14-104. Furthermore, the delegation of investment and management functions shall be carried out in accordance with T.C.A. §35-14-111. Notwithstanding the foregoing, and in accordance with T.C.A. §8-37-104, the assets of the TCRS shall be invested subject to the criteria further established by the Board through this Investment Policy, as may be amended from time to time,.

D. Scope

The Investment Policy is binding on all persons and entities with authority over the TCRS's assets, including, but not limited to, the Board, Investment Staff, External Investment Managers, External Investment Advisers, General Consultant, Service Providers, Master Custodian and any other person who or entity that may have a fiduciary relationship with the TCRS.

III. Objective

The purpose of this Investment Policy is to support the TCRS's primary investment objective by:

- Outlining the distinct roles and responsibilities of the Board, Investment Staff and Service Providers;
- Establishing formalized benchmarks to measure and evaluate the performance results of the Total Assets;
- Setting forth the additional investment criteria, which the Board determines to be prudent in consideration of the purposes, terms, distribution requirements and other circumstances of the TCRS and in the best interest of the beneficiaries;
- Communicating the Investment Policy, as approved by the Board, to the Investment Staff, External Investment Managers, External Investment Advisers, General Consultant, Service Providers, Master Custodian and any other person who or entity that may have a fiduciary relationship with the TCRS; and
- Functioning as a supervisory tool, guiding the ongoing oversight of the Total Assets.

IV. Roles and Responsibilities

In addition to the responsibilities described below and throughout this Investment Policy, Service Providers, as well as any other person who or entity that may have a fiduciary relationship with the TCRS, may have additional duties and responsibilities outlined within federal and state laws, rules and regulations; executed contracts or agreements; or as dictated by standard business or industry practices.

A. Board of Trustees

- 1) Adopt an Investment Policy that establishes the additional investment criteria, which the Board determines to be prudent in consideration of the purposes, terms, distribution requirements and other circumstances of the TCRS;
- 2) Delegate investment and management functions that a prudent trustee of comparable skills would properly delegate under the circumstances;
- 3) Review and, if applicable, authorize the use of Service Providers or the processes employed by Investment Staff;
- 4) Evaluate the investment performance of the Total Assets through reports supplied by the State Treasurer, Chief Investment Officer, Investment Staff and Service Providers; and
- 5) Periodically review the actions taken by delegates in order to monitor performance and compliance with the terms of the delegation.

B. Investment Advisory Council

- 1) Review information furnished to the Investment Advisory Council; and
- 2) Provide such investment advice to the State Treasurer and Chief Investment Officer as the Investment Advisory Council deems appropriate.

C. Investment Committee

- 1) Evaluate the investment performance of the traditional private equity, strategic lending and real estate portfolios, through reports supplied by the State Treasurer, Chief Investment Officer, Investment Staff and Service Providers;
- 2) Approve private equity, strategic lending and real estate commitments or transactions that equal or exceed seventy-five million dollars ($\geq \$75,000,000$); and
- 3) Review other information that may be furnished to the Investment Committee and, as applicable, provide assistance to the Board, State Treasurer and Chief Investment Officer.

Comment [JS1]: Material Change.

D. State Treasurer

- 1) Implement the Investment Policy, as approved by the Board;
- 2) Operate with a duty of undivided loyalty, investing and managing the TCRS's assets solely in the interest of the beneficiaries;
- 3) Delegate investment and management functions that a prudent trustee of comparable skills would properly delegate under the circumstances;
- 4) Review and, as applicable, authorize the use of Service Providers and the employment of Investment Staff;
- 5) Evaluate and, as applicable, approve the processes employed and procedures established by Investment Staff;
- 6) Evaluate the investment performance of the Total Assets through reports supplied by the Chief Investment Officer, Investment Staff and Service Providers;
- 7) Negotiate and execute, with the advice and counsel of the Legal Advisor, Internal Legal Counsel and/or Outside Legal Counsel, as applicable, all contracts, agreements, forms and memoranda of understanding deemed necessary or desirable for the efficient administration of the TCRS's assets;
- 8) Monitor the Total Assets' compliance with this Investment Policy and applicable federal and state laws, rules and regulations; and
- 9) Take actions that are deemed essential to protect the assets of the TCRS with any emergency actions being promptly reported to the Board.

E. Chief Investment Officer

- 1) Assume executive responsibility and authority, as delegated by the State Treasurer, for the ongoing evaluation and management of the Total Assets, ensuring compliance with the Investment Policy and such other Investment Guidelines, policies, procedures, internal controls, laws, rules and regulations that may apply;

- 2) Operate with a duty of undivided loyalty, investing and managing the TCRS's assets solely in the interest of the beneficiaries;
- 3) Undertake the necessary authority to effectively manage and supervise the Investment Staff;
- 4) Delegate investment and management functions to Investment Staff that a prudent trustee of comparable skills would properly delegate under the circumstances;
- 5) Review and, as applicable, recommend the use of Service Providers, General Consultant, External Investment Managers and External Investment Advisers and the employment of Investment Staff;
- 6) Report to and consult with the State Treasurer and/or his designee on administrative, organizational and investment activities;
- 7) Collaborate, as applicable, with the Investment Committee, Investment Advisory Council, Investment Staff and Service Providers on development and implementation of appropriate investment strategies, policies, procedures and Investment Guidelines;
- 8) Prepare and submit reports, as required, to document investment activities; and
- 9) Notify the State Treasurer of situations that merit the Board's attention.

F. Investment Staff

- 1) Assume fiduciary responsibility and authority, as delegated by the State Treasurer and Chief Investment Officer, for the Investment Staff member's role in the ongoing evaluation and management of the Total Assets;
- 2) Utilize special skills and expertise in an effort to accomplish the primary objective of the Total Assets, as stated in the Investment Policy;
- 3) Operate with a duty of undivided loyalty, investing and managing the TCRS's assets solely in the interest of the beneficiaries;
- 4) Source and evaluate prospective investments on an as-needed basis;
- 5) Ensure compliance with the Investment Policy and such other Investment Guidelines, policies, procedures, internal controls, laws, rules and regulations that may apply;
- 6) Assist the State Treasurer, or his designee, and Chief Investment Officer with respect to any matters related to the TCRS's assets;
- 7) Prepare and submit reports, as required, to document investment activities; and
- 8) Notify the State Treasurer of situations that merit his attention.

G. General Consultant

- 1) Provide a third-party perspective and oversight to applicable portfolios;
- 2) Assess the TCRS's Investment Policy and applicable Investment Guidelines, policies and procedures;
- 3) Assist with developing and implementing Investment Guidelines, policies, procedures and investment strategies;
- 4) Prepare and submit relevant, reliable and timely research, performance reports and objective advice as required or as needed by the Board, State Treasurer, Chief Investment Officer or Investment Staff;

- 5) Source and evaluate prospective investments on an as-needed basis; and
- 6) Support the Investment Staff with respect to any matters related to applicable portfolios.

V. Governing Principles

The Board has adopted a set of governing principles for the oversight of the Total Assets. Those principles are as follows:

A. Primary Investment Objective

The primary investment objective of the Total Assets is to establish a stable, diversified investment portfolio that, in the long-term, will meet or exceed the assumed actuarial rate of return, as adopted by the Board, in order to provide sufficient liquidity to pay beneficiaries in a timely manner.

B. Authorized Asset Classes and Investment Activities

The Board, in accordance with T.C.A. §8-37-101 et. seq., hereby empowers the State Treasurer and Investment Staff to invest and reinvest the TCRS's assets in the following asset-classes and investment activities, subject to all the terms, conditions, limitations and restrictions imposed, as applicable, by this Investment Policy and other Investment Guidelines, policies, procedures, internal controls, laws, rules and regulations that may apply:

- Equities;
- Fixed Income Securities;
- Short-Term Securities;
- Private equity;
- Real estate;
- Cash and Cash Equivalents;
- Canadian securities;
- International securities;
- Canadian and international currency;
- Derivative Instruments;
- Securities lending; and
- Standby note purchaser.

C. General Asset Allocation

Based on input from the Chief Investment Officer, Investment Staff and General Consultant, the Board hereby establishes the following strategic asset allocation ranges:

<u>Asset Classes</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Statutory Limit</u>
Domestic Equity	25%	50%	75%
International Equity	5%	25%	
Emerging Markets Equity	0%	10%	
Domestic Fixed Income Securities	20%	60%	75%
Short-Term Securities	0%	10%	
Inflation Indexed Bonds	0%	15%	
International Fixed Income Securities	0%	10%	
Private Equity	0%	10%	10%
Real Estate	0%	10%	10%
Cash and Cash Equivalents	0%	10%	10%

For purposes of the above table: domestic includes United States and Canada; emerging market is a subset of international; and private equity includes traditional and strategic lending. Additional statutory and Investment Policy limitations may apply.

D. Benchmarks

Based on input from the Chief Investment Officer, Investment Staff and General Consultant, the Board has determined that the investment performance for the Total Assets and each component portfolio will be compared with the following respective benchmark indices:

<u>Portfolio</u>	<u>Benchmark Index</u>	<u>Weight</u>
Equity – United States	S&P 1500	33%
Equity – Canadian	S&P / TSX 60 Index	4%
Equity – International Developed Markets	MSCI EAFE Investable Market Index (IMI)	13%
Equity – Emerging Markets	MSCI Emerging Markets Index	5%
Domestic Fixed Income and Short-Term Securities	Citigroup Large Pension Fund Index	25%
Inflation Indexed Bonds	Citigroup TIPS Index	4%
International Fixed Income and Short-Term Securities	Citigroup Non-U.S. G-5 Government Bond Index	0%
Private Equity – Traditional	S&P 500 + 3%	3%
Private Equity – Strategic Lending	Custom Index: 50% Barclay's High Yield 2% Issuer Capped Index + 50% Credit Suisse Leveraged Loan Index	5%
Real Estate	NCREIF Property Index	7%
Cash and Cash Equivalents	91-Day United States Treasury Bills	1%
TOTAL		100%

To facilitate proper evaluation of the emerging markets equity portfolio, the benchmark index returns will be adjusted to exclude countries based on the country screening methodology developed by Investment Staff and approved by the Chief Investment Officer and State Treasurer. Additionally, the Board recognizes that the performance for some investments, such as private equity and real estate, will lag by a quarter due to the reporting schedules of the underlying holdings.

In recognition of the TCRS's long-term perspective, these performance benchmarks are to be measured through the use of a five-year (5) rolling average. The Total Assets' overall annualized total return should exceed the return available if the TCRS were to invest in an index fund comprised of the above-referenced benchmark indices, weighted as referenced above.

Furthermore, the Total Assets' performance will be calculated on an as-allocated basis, using the actual percentages invested versus the target weight.

VI. Additional Investment Criteria

The Board, in accordance with T.C.A. §8-37-104(a) and (b), hereby imposes the following, terms, conditions, limitations and restrictions, which supersede, as applicable, those terms, conditions, limitations and restrictions contained in T.C.A. §56-3-303 through 306. The disqualification of an investment under one (1) section of this Investment Policy does not prevent its qualification in whole or in part under another section.

A. Equity

No Equity will be purchased with the purpose or with the effect of changing or influencing the control of the issuer. Additionally, no more than four and ninety-nine one hundredths percent ($\leq 4.99\%$) of a voting class of a company's equity securities registered under Section 12 of the Securities Exchange Act of 1934 (i.e., outstanding shares) shall be, directly or indirectly, acquired.

B. Fixed Income Securities and Short-Term Securities

Only Fixed Income Securities and Short-Term Securities rated Investment Grade by one of the designated Nationally Recognized Statistical Rating Organizations ("NRSROs") shall be purchased. This rating restriction does not apply to bond ETFs or debt Restricted Securities. Additionally, there is no requirement to divest of an asset if it is downgraded below Investment Grade.

The TCRS may transact in when-issued, To Be Announced ("TBA"), dollar roll and other transactions that result or may result in delayed delivery for the purchase or sale of Fixed Income Securities. Cash and obligations of the United States government or any of its agencies may be used to meet variation margin or collateral requirements.

C. Private Equity

The private equity asset class is categorized into two component portfolios: traditional and strategic lending.

1. Disclosure Process

Any TCRS employee or Board member who has a role in determining whether the TCRS assets should be invested in a private equity investment and who is directly solicited by any person or entity on a specific private equity investment proposal must disclose such to the Investment Staff.

For purposes of this disclosure process, "directly solicited" means direct personal contact by person(s) or entity(ies) intending to solicit funding for a specific private equity fund or transaction. This direct contact will typically include a discussion on a particular investment, the merits of that investment and detailed documentation supporting the investment. Casual meetings and telephone calls of a general nature are not deemed to be a direct solicitation for purpose of this disclosure process.

The names of any person(s) or entity(ies) disclosed to Investment Staff pursuant to this disclosure process will be recorded by the Investment Staff and reported to the audit committee of the Board on a quarterly basis.

2. Contractual Obligations

Traditional private equity and strategic lending investments may involve various contracts and legal agreements. Any contractual terms, including those related to fees, will be consistent with the then-current market for comparable investments.

3. Process for and Factors Used in Selection

The process for selecting and approving traditional private equity and strategic lending investments will be outlined within the Traditional Private Equity and Strategic Lending Investment Guidelines. At a minimum, such Investment Guidelines must detail the introduction, due diligence, recommendation, approval, legal review and closing processes.

The following factors and standards are to be used, at a minimum, by Investment Staff in the selection of traditional private equity and strategic lending investments:

- **Key Personnel** – Key personnel should possess specialized skills and expertise; reputable professional background; and be appropriately registered, or exempt from registration, under the applicable state and federal securities laws, rules and regulations;
- **Strategy and Strategic Fit** – A private equity investment should be selected based, in part, on its ability to improve the overall risk and return profile of the Total Assets and its contribution to portfolio diversification;
- **Legal and Economic Terms** – Investment terms and/or contracts should be actively negotiated to ensure that the interest of the partners and/or investment managers align with the interests of the TCRS and that the TCRS is adequately compensated based, in part, on the level of investment risk.

The Board recognizes that other factors and standards should be used in evaluating and selecting traditional private equity and strategic lending investments and relies on Investment Staff and the respective investment consultant to use reasonable judgment in proactively investigating proposed traditional private equity and strategic lending investments. Prior to consideration of a traditional private equity or strategic lending investment, an independent third-party advisor selected by the TCRS (i.e., External Investment Advisor, External Investment Manager, General Consultant, investment consultant, etc.) must determine that the proposed investment complies with the factors and standards as established within this Investment Policy and any applicable Investment Guidelines.

4. Open Records Exception

Traditional private equity or strategic lending investment records shall be open to public inspection in accordance with and pursuant to T.C.A. §8-37-104(a)(10)(C).

5. Holding Entities

The Board authorizes the State Treasurer and Investment Staff to create holding entities, to the extent permitted by law, on behalf of the TCRS for the purpose of acquiring, holding title to and collecting income from traditional private equity or strategic lending investments. The Board also authorizes the transfer of a traditional private equity or strategic lending investment from direct ownership to a title holding entity on behalf of the TCRS (or the converse) during the course of a holding period of the traditional private equity or strategic lending investment, if deemed prudent.

6. Investment Types and Risk Control Measures – Traditional Private Equity

Traditional private equity investments may include, but shall not be limited to, the following types of investments: Venture Capital; Buyout; Distressed; Growth Equity; Resource; and Other Opportunities.

The following risk control measures will be implemented in the oversight of the traditional private equity portfolio:

- Financing Stage – The traditional private equity portfolio will mitigate company and financing life-cycle risk through diversification in investment types.
- Investment Timing – Vintage year risk will be monitored during the initial funding phase of the traditional private equity portfolio;
- Industry Concentration – No more than forty percent ($\leq 40\%$) of the traditional private equity portfolio commitments will be made to a single industry within a particular sector;
- General Partner Concentration – No more than twenty percent ($\leq 20\%$) of the traditional private equity portfolio target shall be committed to a single External Investment Manager;
- Investment Size – The TCRS will represent no more than fifteen percent ($\leq 15\%$) of the targeted size of a limited partnership without the written approval of the State Treasurer; and
- Operational Matters – The traditional private equity portfolio will mitigate operational risk through the use of multiple managers, strategies and investment types.

7. Investment Types and Risk Control Measures – Strategic Lending

Strategic lending investments may include, but shall not be limited to, the following types of investments: High Yield Bonds; Levered and Unlevered Loans; Emerging Market Debt; Distressed Debt; Mezzanine Debt; Direct Lending; Structured Credit; Real Estate Debt; and Other Opportunities.

The following risk control measures will be implemented in the oversight of the strategic lending portfolio:

- Financing Stage and Industry Concentration – The strategic lending portfolio may be somewhat under-diversified on a standalone basis due to the opportunistic nature of the portfolio and such risks are mitigated at the Total Assets level;
- Investment Timing – Generally, vintage year risk does not pose a concern for the strategic lending portfolio;
- General Partner Concentration – No more than fifty percent ($\leq 50\%$) of the strategic lending portfolio target shall be committed to a single External Investment Manager;
- Investment Size – The TCRS will represent no more than fifteen percent ($\leq 15\%$) of the targeted size of a commingled investment vehicle without the written approval of the State Treasurer; and
- Operational Matters – The strategic lending portfolio will mitigate operational risk through the use of multiple managers, strategies and investment types.

D. Real Estate

Acquisitions of real estate may be made in Direct Investments or Commingled Investments provided that:

- No Direct Investment may be located in the state of Tennessee; and
- No Direct Investment shall exceed one-half of one percent ($< 0.5\%$) of the Market Value of the Total Assets.

Furthermore, of the greater of the real estate portfolio's target allocation or the total value invested:

- No more than forty percent ($\leq 40\%$) shall be committed to a single External Investment Manager or External Investment Adviser; and
- Seventy percent or more ($\geq 70\%$) will be comprised of Core Investments.

Comment [JS2]: Material Change.

The process for selecting and approving real estate investments will be outlined within the Real Estate Investment Guidelines. At a minimum, such Investment Guidelines must detail the introduction, due diligence, recommendation, approval, legal review and closing processes.

The Board authorizes the State Treasurer and Investment Staff to create entities, to the extent permitted by law, on behalf of the TCRS for the purpose of acquiring, holding title to, and collecting income from real property. The Board also authorizes the transfer of real estate property from direct ownership to a title holding entity on behalf of the TCRS (or the converse) during the course of a holding period of the real estate investment.

E. Cash and Cash Equivalents

Cash that cannot be invested immediately, or that is needed for operations, should be actively managed through the use of cash and Cash Equivalents to obtain the best return available. Cash may also be invested in short-term, open-end mutual funds under the contractual arrangement with the Master Custodian or invested in the State Pooled Investment Fund.

Cash Equivalents must be rated within the highest tier (e.g., A-1) by at least two (≥ 2) of the designated NRSROs; rating modifiers (+, -) should not be considered when determining the tiers.

The TCRS shall invest not more than one hundred million dollars ($\leq \$100,000,000$) in Cash Equivalents issued by any one issuer, excluding Cash Equivalents

- Issued by the United States, any agency of the United States federal government or any entity with the express or implied backing of the United States; or
- That matures on the next business day.

For purposes of this section, “business day” shall mean any day on which (i) the United States securities exchanges, (ii) the Master Custodian and (iii) the State of Tennessee, Department of Treasury are open for regular business activity.

F. Canadian Securities

The TCRS may invest in publicly traded, Canadian securities that are otherwise of the same kinds, classes and investment grades otherwise eligible for investment.

G. International Securities

Comment [JS3]: Material Change.

The TCRS may invest in publicly traded, international securities that are otherwise of the same kinds, classes and investment grades otherwise eligible for investment.

The Board hereby authorizes up to twenty-five percent ($\leq 25\%$) of the Total Assets may be invested in international securities, up to ten percent ($\leq 10\%$) of which may be invested in emerging markets.

The Board hereby determines that the following international countries are permissible:

- International countries included in the Morgan Stanley Capital International (“MSCI”) EAFE Investable Market Index (“IMI”), as amended from time to time (i.e., international developed markets); and
- International countries included in the MSCI Emerging Markets (“EM”) Index, as amended from time to time (i.e., emerging markets).

Suitability of investing in such emerging markets countries shall be further subject to a screening methodology reviewed by the TCRS’s General Consultant, recommended by the Chief Investment Officer and approved by the State Treasurer.

For purposes of the TCRS’s international securities investments, a security’s country classification will be determined, at the time of acquisition, using the following criteria:

- Market in which the issuer conducts its primary business (“Country Classification”);
- Issuer’s management location, country of primary listing, country of revenue and reporting currency (“Country of Risk”); and
- Country in which the issuer is legally established (“Country of Incorporation”).

The issuer’s parent and ultimate parent entity(ies) and the security’s geographical focus, if applicable, may also be evaluated in order to determine a security’s country classification.

H. Canadian and International Currency

Comment [JS4]: Material Change.

Canadian and international currency transactions are permitted as necessary to facilitate the settlement of Canadian and international securities transactions and to mitigate currency risk. The TCRS may engage in “bona fide spot foreign exchange transactions,” as defined by the United States Commodities Futures Trading Commission (“CFTC”), Hedging Transactions, Income Generation Transactions or Replication Transactions involving currencies of Canada and those international countries authorized pursuant to this Investment Policy. Cash and obligations of the United States government or any of its agencies may be used to meet variation margin or collateral requirements related to currency transactions.

Hedging Transactions, Income Generation Transactions and Replication Transactions will be executed only with registered swap dealers.

I. Derivative Instruments

Comment [JS5]: Material Change.

The TCRS may purchase or sell stock index futures. Stock index futures contracts shall

- Not be utilized for purposes of “speculative leveraging” as defined in T.C.A. §8-37-104(a)(7);
- Be classified by and included in the asset allocation ranges of the domestic and international equity portfolios;
- Be measured in their notional principal or notional equivalent amount; and
- Not exceed ten percent ($\leq 10\%$) of the Market Value of the Total Assets.

Cash and obligations of the United States government or any of its agencies may be used to meet variation margin or collateral requirements related to stock index futures.

Additionally, the TCRS may engage in Hedging Transactions, Income Generation Transactions or Replication Transactions involving Derivative Instruments under the following conditions:

- Derivative Instruments will be measured in their notional principal or notional equivalent amount;
- Derivative Instruments, excluding currency Derivative Instruments, shall not exceed twenty percent ($\leq 20\%$) of the Market Value of the Total Assets; and
- Cash and obligations of the United States government or any of its agencies may be used to meet variation margin or collateral requirements.

Hedging Transactions, Income Generation Transactions and Replication Transactions shall be executed only with registered swap dealers.

J. Securities Lending

The TCRS may loan its securities for a fee, provided that:

- The total market value of securities on loan does not exceed thirty percent ($< 30\%$) of the Market Value of the Total Assets; and
- Each loan is collateralized in accordance with this Investment Policy.

Only the following types of financial instruments will be acceptable collateral for purposes of securities lending:

- Bonds, notes and treasury bills of the United States or other obligations guaranteed as to principal and interest by the United States government or any of its agencies;
- Obligations guaranteed as to principal and interest by the United States government or United States sponsored corporations or enterprises; and
- Cash.

Collateral will be marked-to-market, each business day, to ensure that on any business day the market value, plus accrued but unpaid rebates and, in the case of debt securities, accrued but unpaid interest, of the collateral held in respect to a securities lending transaction is not less than:

- 102% ($\geq 102\%$) of the aggregate market value of the loaned securities for domestic securities and international securities that are denominated in the same currency as the collateral provided by the borrower;
- 105% ($\geq 105\%$) of the aggregate market value of the loaned securities for international securities that are not denominated in the same currency as the collateral provided by the borrower; or
- 100% ($\geq 100\%$) for cash collateral.

Cash received as collateral may be invested by or on behalf of the TCRS in any investment instrument in which the TCRS's assets may be directly invested. Such cash may also be invested in short-term investment funds, provided the portfolio of such funds contains only those investment instruments in which the TCRS's assets may be directly invested.

K. Standby Note Purchaser

The TCRS may enter into contracts to serve as a standby note purchaser for the Tennessee State School Bond Authority, the Tennessee State Funding Board and the Tennessee Local Development Authority, provided said contracts contain the following provisions:

- The TCRS receives an annual commission, representing a fair market value fee for serving as the standby note purchaser; such fee shall be reviewed annually and, as appropriate, adjusted; and
- If called upon to purchase such notes, the TCRS shall receive a market rate of return exceeding the market rate for short-term investments.

VII. Risk Management

A. Rebalancing and Transitioning

The Total Assets should be actively managed in an effort to attain, within acceptable risk limitations, the TCRS's primary investment objective. As such, the Chief Investment Officer and Investment Staff shall have the ability to make tactical shifts in asset allocations as deemed appropriate to increase risk-adjusted returns, so long as such changes are within the approved asset allocation ranges as stated within this Investment Policy.

Additionally, the Board recognizes that one or more component portfolio may experience a period of transition due to, for example, an initial funding phase, rebalancing or strategy shift. The Board acknowledges that during a transition period it may be necessary to analyze assets based upon terminal value and not relative to a benchmark.

B. Percentage Limitations

In determining compliance with the percentage limitations stated within this Investment Policy, the Total Assets will be valued at Market Value. Accordingly, an investment may be made on any given day provided that such investment does not cause any applicable limitation prescribed in this Investment Policy to be exceeded on such day.

C. Designated Nationally Recognized Statistical Rating Organizations (“NRSROs”)

The credit ratings of any credit rating agency that is registered with the Securities and Exchange Commission (“SEC”) as a NRSRO will be deemed sufficiently reliable for use to determine a security’s investment grade and eligibility under this Investment Policy.

D. Trading, Brokerage and Research

Best execution, cost and benefits that serve the exclusive interest of the beneficiaries are the overriding principles in determining the trading and brokerage counterparty to be used in any transaction.

The State Treasurer and Investment Staff are hereby authorized to transact with duly selected trading and brokerage counterparties. Selection of trading and brokerage counterparties shall be subject to the qualifications and processes established by the Investment Staff and approved by the State Treasurer.

The State Treasurer and Investment Staff are hereby authorized to enter into client commission agreements or commission sharing or rebate arrangements in order to obtain research services permitted under the safe harbor protections of Section 28(e) of the Securities and Exchange Act of 1934.

E. Service Providers

Comment [JS6]: Material Change.

The State Treasurer, in consultation with the Chief Investment Officer and Internal Legal Counsel, is authorized to contract for investment management services, personal services, professional services and consultant services as necessary and in the best interest of the TCRS. Such services include, but are not limited to, those provided by a General Consultant, External Investment Advisers, External Investment Managers, Outside Legal Counsel, investment consultants, data providers, data aggregators, securities litigation monitors, proxy advisors, investment and performance analytics, trading and execution platforms, research providers, etc. The Board delegates to the State Treasurer, in consultation with the Chief Investment Officer and Internal Legal Counsel, the responsibility to determine the procurement method for and duties and responsibilities of such Service Providers.

Pursuant to, and as defined in, T.C.A. §8-37-113 the State Treasurer shall endeavor to use “emerging investment managers” to the greatest extent feasible within the bounds of financial and fiduciary prudence. Use of “emerging investment managers” shall be subject to the qualifications established by the Investment Staff and approved by the State Treasurer.

F. Legal, Compliance and Audit

The State Treasurer, in consultation with Internal Legal Counsel and with the approval of the Legal Advisor, has primary responsibility for the retention of Outside Legal Counsel. The State Treasurer and Internal Legal Counsel shall consult, as needed and applicable, with the Legal Advisor and/or Outside Legal Counsel. The State Treasurer, or his designee(s), has the authority to negotiate and execute, with the advice and counsel of the Legal Advisor, Internal Legal Counsel and/or Outside Legal Counsel, as applicable, all contracts, agreements, forms and memoranda of understanding deemed necessary or desirable for the efficient administration of the TCRS's assets.

The Chief Investment Officer and Investment Staff will collaborate with the Department of Treasury compliance staff to ensure efficient and effective development and administration of a compliance program that is reasonably designed to prevent, detect and, if necessary, remedy violations of the laws, rules, regulations and policies applicable to the Department of Treasury Investment Division's investment and securities activities.

To aid in the safeguarding of the TCRS's assets, the Department of Treasury internal audit staff will periodically evaluate risk control areas as to their adequacy, efficiency and effectiveness. Additionally, the State Treasurer shall ensure that critical investment, accounting and legal, compliance and audit functions are segregated within the Department of Treasury.

G. Investment Guidelines, Policies and Procedures

The Investment Policy includes references to Investment Guidelines, policies and procedures established and implemented by the State Treasurer and Investment Staff. The Board deems these Investment Guidelines, policies and procedures as integral components to the implementation and oversight of the TCRS's Investment Policy. At a minimum, the State Treasurer shall implement detailed Investment Guidelines for Derivative Instruments, traditional private equity, strategic lending, real estate and securities lending. Additionally, the State Treasurer shall implement written policies and procedures related to proxy voting, trade management and supervision, evaluation of research services, the use of placement agents and conflicts of interest.

VIII. Monitoring and Reporting

A. Quarterly

The State Treasurer shall report quarterly to the Council on Pensions and Insurance any holdings in securities issued by companies that have substantial current operations in nations determined by the United States Department of State to be state-sponsors of terrorism.

The State Treasurer shall also report quarterly to the Council on Pensions and Insurance the investments in emerging market countries.

The Chief Investment Officer shall provide a detailed, written review of the investment activity at the quarterly Board meetings. Pursuant to the private equity

disclosure process (Section VI.C.1), the Investment Staff will report the required information to the audit committee of the Board on a quarterly basis.

B. Periodically

The Chief Investment Officer shall provide a detailed, written report of the investment activity, including, but not limited to, presenting all receipts, disbursements and changes in the assets and liabilities, at all Investment Advisory Council meetings.

The State Treasurer, Chief Investment Officer, Investment Staff and Service Providers, shall provide other reports as requested or as needed by the Board or State Treasurer.

C. Annually

The Board shall publish an annual report. The Chief Investment Officer, Investment Staff and, as needed, Service Providers shall assist in preparing the investment-related portions of the annual report.

The State Treasurer shall prepare an annual report of investment activity to the Council on Pensions and Insurance. Such report will consist of the General Consultant's report and a summary of the closing balances of investments in emerging market countries.

The State Treasurer, in accordance with T.C.A. §8-37-113(b) shall submit an annual statement to the general assembly regarding the use of emerging investment managers.

At least annually, the General Consultant shall review the TCRS's Investment Policy and applicable Investment Guidelines, policies and procedures and provide its recommendations to the State Treasurer and Chief Investment Officer for consideration.

IX. Policy Interpretation

Comment [JS7]: Material Change.

The Board, State Treasurer, Investment Staff and Service Providers are required to comply with all applicable federal and state laws, rules and regulations. The Investment Policy may reference or restate applicable laws, rules and regulations, or portions thereof, for convenience; however, in the event of any conflict between the law and this Investment Policy, the law prevails. Each fiduciary to the TCRS is ultimately responsible for compliance with applicable laws, rules and regulations.

The Board hereby authorizes the State Treasurer to take, for and on behalf of the TCRS, all actions necessary to comply with applicable federal and state securities laws, rules and regulations. In implementing such, the State Treasurer may delegate certain responsibilities to the Investment Staff, Department of Treasury staff or Service Providers.

In cases of uncertainty, the State Treasurer is authorized to provide written interpretive guidance and approve in writing, from time to time, variances from the requirements contained within the Investment Policy in furtherance of compliance or as deemed in the best interest of the TCRS's beneficiaries, consistent with both fiduciary standards and the scope of the Investment Policy. Such interpretive guidance or variance shall be reported in writing to the Board at its next meeting and to the Council of Pensions and Insurance within a reasonable time.

X. Approval and Adoption

The Council on Pensions and Insurance hereby approved, as required, the applicable provisions within this revised and restated Investment Policy of the Tennessee Consolidated Retirement System at its meeting held on the _____ day of _____, _____.

RANDY McNALLY, COMMITTEE CHAIR
Council on Pensions and Insurance

The Board of Trustees of the Tennessee Consolidated Retirement System hereby approved and adopted this revised and restated Investment Policy of the Tennessee Consolidated Retirement System at its meeting on the _____ day of _____, _____.

DAVID H. LILLARD, JR., CHAIRMAN
BOARD OF TRUSTEES
Tennessee Consolidated Retirement System

**POLITICAL SUBDIVISIONS
SEEKING MEMBERSHIP**

**Political Subdivisions Beginning Participation
in the Tennessee Consolidated Retirement System
April 1, 2015**

Political Subdivision	Amount of Service Purchased		Employee	Employer Rate	Accrued Liability	Cost of Living	Number of Employees
	Employer	Employee					
<u>City of Tullahoma</u>							
Regular Defined Benefit Plan	0	0		Normal	5.64 %		
				Accrued	0.00 %	\$0.00	
				Adm. Cost	.14 %		
				TOTAL	5.78 %		
						Include	142

Meetings:

- March, 2015 Explained results of actuarial study and participation procedures to the governing body.
- March, 2015 Explained laws, policies and benefit provisions to employees of the district.
- March, 2015 Explained reporting procedures to payroll officer.



STATE OF TENNESSEE
TENNESSEE CONSOLIDATED RETIREMENT SYSTEM
502 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0201

DAVID H. LILLARD, JR.
STATE TREASURER

JILL BACHUS
DIRECTOR

MEMORANDUM

TO: Sandi Thompson, Division of Local Finance
FROM: Karen Curtis, TCRS Employer Services *KC*
SUBJECT: Participation in Tennessee Consolidated Retirement System
DATE: February 12, 2015

The City of Tullahoma will begin participation in the Tennessee Consolidated Retirement System effective 4/1/2015.

The Board of Trustees of the TCRS requires a political subdivision to appropriate the necessary funds in their annual budget for retirement costs. The total first year cost for the entity is Three Hundred and Thirty Nine Thousand, Six Hundred and Thirteen Dollars (\$339,613). Twenty Five Percent (25%) of this figure, or \$84,904.00, is required to be budgeted for the fiscal year 2015 budgeted year ending June 30, 2015.

Enclosed is the fiscal year 2015 budget for this entity. Please let me know if this information is sufficient and accurately reflects adequate funding for retirement costs for this entity.

If you have any questions, please call me at (615) 741-1971.

Enclosure



**STATE OF TENNESSEE
COMPTROLLER OF THE TREASURY
OFFICE OF STATE AND LOCAL FINANCE
SUITE 1600 JAMES K. POLK STATE OFFICE BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
PHONE (615) 401-7872
FAX (615) 741-5986**

Memorandum

TO: Karen Curtis, TCRS Employer Services

FROM: Sandra Thompson, Director

A handwritten signature in cursive script, reading "Sandra Thompson", is written over the printed name in the "FROM:" line.

DATE: March 2, 2015

SUBJECT: City of Tullahoma

The fiscal year 2015 annual budget submitted by the City of Tullahoma appears sufficient to fund the required \$84,904 first year retirement contribution for the fiscal year ending June 30, 2015. The City budgeted \$273,153 for retirement in its fiscal year 2015 budget.

The financial information received by this Office with the request for the review of the City's budget represents the City's assertions of its financial condition that may or may not reflect its current or future financial condition.

If you need additional information, please do not hesitate to contact me.

RESOLUTION NO. 1637,

A RESOLUTION TO AUTHORIZE A POLITICAL SUBDIVISIONS PARTICIPATION IN THE TENNESSEE CONSOLIDATED RETIREMENT SYSTEM IN ACCORDANCE WITH TENNESSEE CODE ANNOTATED, TITLE 8, SECTION 34-37.

WHEREAS, Tennessee Code Annotated, Title 8, Chapter 35, Part 2 allows a political subdivision to participate in the Tennessee Consolidated Retirement System ("TCRS") subject to the approval of the TCRS Board of Trustees; and

WHEREAS, the City of Tullahoma desires to participate in TCRS under the provisions of Tennessee Code Annotated, Title 8, Chapters 34 – 37 and in accordance with the following terms and conditions:

- A. The Regular Defined Benefit is adopted by the City of Tullahoma; and
- B. Employee contributions will NOT be assumed by the City of Tullahoma; and
- C. The City of Tullahoma shall PROVIDE cost-of-living increases for retirees; and
- D. Part-time employees will NOT be eligible to participate in TCRS; and
- E. Prior Service is determined based on the City of Tullahoma electing NOT to allow its employees to establish any prior service credit.

WHEREAS, the liability for participation and costs of administration shall be the sole responsibility of the City of Tullahoma and not the State of Tennessee; and

WHEREAS, the City of Tullahoma has passed a budget amendment appropriating the funds necessary to meet such liability and the same is attached hereto; and

WHEREAS, the effective date of participation shall be on April 1, 2015 or on such later date as determined by the TCRS Board of Trustees, and the initial employer contribution rate shall be 5.78%, which is based on the estimated lump sum accrued liability of \$0.00.

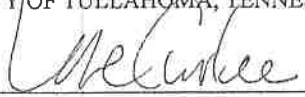
NOW, THEREFORE, BE IT RESOLVED that the Board of Mayor and Alderman of the City of Tullahoma, Tennessee hereby authorizes all its full-time employees in all its departments or instrumentalities to become eligible to participate in TCRS in accordance with the above terms and conditions subject to the approval of the TCRS Board of Trustees.

It is acknowledged and understood that pursuant to Tennessee Code Annotated, Section 8-35-111 the Political Subdivision shall not make employer contributions to any other retirement or deferred compensation plans on behalf of any employee who participates in TCRS pursuant to this Resolution.

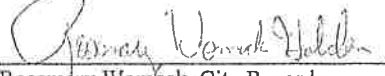
BE IT FURTHER RESOLVED, by the Board of Mayor and Aldermen of the City of Tullahoma, Tennessee, that this Resolution shall be in full force and effect from and after its passage, the public welfare requiring it.

Enacted this 9th day of February, 2015.

CITY OF TULLAHOMA, TENNESSEE


Lane Curlee, Mayor

ATTEST:


Rosemary Womack, City Recorder

An actuarial valuation was performed as of July 1, 2014 to examine the cost of any benefits provided by the Tennessee Consolidated Retirement System (TCRS) as it would apply to the City of Tullahoma if the group joined the TCRS on that date.

The TCRS offers three different plan design options for political subdivisions, referred to throughout this report as Plan 1, Plan 2, and Plan 3. Each of the three plans has a unique set of benefits and corresponding costs. The description of the benefits can be found in the Plan Provisions section of this report. The summary of the annual employer costs as a percentage of payroll for each of the three plans is shown in the table below. Further, within Plan 1 and Plan 2, each political subdivision can elect whether to include or exclude cost of living benefits in its retirement plan. If cost of living benefits are included, they must be "advance funded" in the same manner as other retirement benefits. Costs have been developed both "with" and "without" cost of living benefits for Plan 1 and Plan 2. Plan 3 is required to include cost of living benefits.

Each political subdivision joining the TCRS also has the option of whether or not to include employees' past service (service earned prior to the date of joining the TCRS) in the determination of benefits. If past service is included, the political subdivision may elect whether or not to limit the past service to a selected number of years. Further, the included years of past service may be fully purchased by the employer, or the employee can be made to be responsible for voluntarily purchasing the past service with the employer accepting its share of the liability for any years that the employee purchases. The prospective annual employer cost as a percentage of payroll for each of the past service scenarios currently considered by the entity is shown below.

	Plan 1		Plan 2		Plan 3
	Without COLA	With COLA	Without COLA	With COLA	With COLA
Past Service Scenarios					
1. No Past Service	3.87%	5.78%	1.77%	3.08%	0.82%

The above results assume that employees will contribute 5% of pay toward the future cost of their retirement benefit. Alternatively, the entity may elect to charge only 2.5% employee contributions or to require no employee contributions, in which case TCRS will increase the above results by 2.5% or 5%, respectively.

Distribution of Active Participants with Average Compensation

Attained Age	Years of Service											Total
	Under 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	Over 39		
Under 25		2									2	\$28,381
		\$28,381										
25 - 29	1	13	4								18	\$41,251
	\$30,548	\$42,624	\$39,464									
30 - 34	1	4	6	1							12	\$38,602
	\$36,093	\$40,195	\$38,592	\$34,799								
35 - 39	1	8	2	3	1						15	\$36,728
	\$28,391	\$36,073	\$37,399	\$38,980	\$42,209							
40 - 44	1	6	1	3	1	1					13	\$37,927
	\$24,183	\$38,117	\$39,729	\$37,631	\$41,962	\$45,589						
45 - 49	1	5	4	5	3	1	1				20	\$37,909
	\$28,177	\$40,186	\$32,514	\$37,616	\$39,057	\$44,961	\$48,816					
50 - 54		4	1	5	5	4	3	2			24	\$42,554
		\$28,638	\$27,816	\$47,725	\$44,331	\$41,769	\$56,637	\$40,829				
55 - 59		2	11	2	2	5	1	1	1		25	\$38,137
		\$32,473	\$34,787	\$26,578	\$70,846	\$41,656	\$34,588	\$42,287	\$25,822			
60 - 64	1	1	1	1	1		2			1	8	\$42,741
	\$64,603	\$45,606	\$30,073	\$32,294	\$41,634		\$38,978			\$49,758		
65 - 69					1	2	1		1		5	\$44,476
					\$66,284	\$42,353	\$32,687		\$38,701			
Over 69												
Total	6	45	30	20	14	13	8	3	2	1	142	\$39,463
	\$35,333	\$38,111	\$35,818	\$38,839	\$48,043	\$42,355	\$45,495	\$41,315	\$32,261	\$49,758		

STATISTICAL REPORTS

ANALYSIS OF MEMBERS ACTIVELY CONTRIBUTING

	6/30/2011	6/30/2012	6/30/2013	9/30/2013	12/31/2013	3/31/2014	6/30/2014	12/31/2014
Group I Members:								
(State & Higher Ed.)	57,592	56,566	56,008	55,609	55,909	55,958	56,390	56,690
Teachers	79,583	78,613	78,303	78,393	78,106	78,244	78,506	71,866
General Employees of Polisubs	81,751	80,784	79,984	77,592	76,931	77,706	78,144	84,905
General Assembly	127	129	128	127	128	128	128	115
County Officials	2	2	2	2	2	2	2	2
PSC								
County Judges	1	1	1	1	1	1	1	1
Attorneys General	635	648	656	671	669	682	683	623
Total Group I	219,691	216,743	215,082	212,395	211,746	212,721	213,854	214,202
Group II & Prior Class:								
Wildlife Officers	3	2	2	2	2	2	2	1
Highway Patrol	6	3	3	1	1	1	1	1
Firemen & Policemen-Political Subdivisions	21	16	14	13	12	8	11	10
Total Group II & Prior Class	30	21	19	16	15	11	14	12
Group III and Prior Class:								
State Judges	2	2	1	1	1	1	1	1
County Judges								
Attorneys General	5	5	4	4	4	3	3	3
County Officials	5	5	4	4	4	4	4	3
Total Group III & Prior Class	12	12	9	9	9	8	8	7
Group IV								
State Judges	181	182	183	184	184	184	184	126
State & Teacher Hybrid Plan								
State								3,063
General Assembly								10
Teacher								6,067
Attorneys General, Judges								29
Political Subdivisions								66
Local Government Plans								
Alternate DB								13
Hybrid Plan W/O Cost Controls								63
Total Membership								
Contributing to TCRS	219,914	216,958	215,293	212,604	211,954	212,924	214,060	223,658
Teachers Contributing to ORP	11,562	11,575	11,627	11,688	11,659	11,694	11,683	11,683
Grand Totals	231,476	228,533	226,920	224,292	223,613	224,618	225,743	235,341

NUMBER OF MEMBERS REFUNDED

<u>Month</u>	<u>2008-09</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>2014-15</u>
July	450	894	499	496	475	516	613
August	308	612	406	466	471	782	820
September	316	494	431	447	394	457	586
October	411	369	379	383	375	378	483
November	353	320	293	364	319	314	244
December	257	256	276	257	241	276	338
January	332	257	307	348	338	402	
February	310	242	265	312	335	310	
March	291	278	299	262	253	284	
April	311	687	277	346	311	424	
May	217	385	662	329	274	866	
June	340	360	406	339	336	674	
TOTAL	<u><u>3,896</u></u>	<u><u>5,154</u></u>	<u><u>4,500</u></u>	<u><u>4,349</u></u>	<u><u>4,122</u></u>	<u><u>5,683</u></u>	<u><u>3,084</u></u>

**REFUND EXPENDITURES
2014-2015 FISCAL YEAR**

MONTH	MEMBER'S CONTRIBUTIONS	414(H) CONTRIBUTIONS	MEMBER'S INTEREST	EMPLOYER CONTRIBUTIONS	DEATH PAYMENTS	TOTAL
July	266,441.24	3,890,375.29	1,447,111.32	126,187.64	582,724.33	\$6,312,839.82
August	507,883.89	4,655,452.55	1,961,867.60	44,918.14	310,924.58	\$7,481,046.76
September	152,881.65	4,331,112.77	1,360,359.96	94,105.25	534,024.37	\$6,472,484.00
October	128,318.86	3,412,739.87	930,882.35	321.75	107,156.94	\$4,579,419.77
November	151,196.08	2,005,478.21	684,258.78	45,012.69	212,015.66	\$3,097,961.42
December	122,578.10	2,298,965.04	928,283.16	119,374.12	412,621.40	\$3,881,821.82
January						
February						
March						
April						
May						
June						
TOTAL	1,329,299.82	20,594,123.73	7,312,763.17	429,919.59	2,159,467.28	\$31,825,573.59

**RETIRED PAYROLL
STATISTICS
December 31, 2014**

	<u>Amount</u>	<u># of Retirees</u>
STATE EMPLOYEES	54,574,453.11	41,322
STATE PAID JUDGES	1,036,321.20	207
COUNTY PAID JUDGES	326,606.11	95
ATTORNEY GENERALS	976,314.01	258
COUNTY OFFICIALS	386,872.19	188
PUBLIC SERVICE COMMISSIONERS	9,243.18	5
POLITICAL SUBDIVISIONS	29,444,557.39	34,602
TEACHERS	95,752,915.78	46,076
LOCAL TEACHERS	3,492,652.84	1,912
GOVERNORS AND WIDOWS	30,772.00	5
AGED STATE EMPLOYEES	137.43	1
AGED TEACHERS	1,091.41	8
OTHERS	<u>\$107,153.85</u>	<u>256</u>
Total	\$186,139,090.50	124,935

RETIRED PAYROLL
October 1, 2014
THROUGH
December 1, 2014

	<u>Amount</u>	<u># of Retirees</u>
STATE EMPLOYEES	162,365,006.12	41,322
STATE PAID JUDGES	3,115,049.62	207
COUNTY PAID JUDGES	985,581.27	95
ATTORNEY GENERALS	2,874,429.77	258
COUNTY OFFICIALS	1,167,663.52	188
PUBLIC SERVICE COMMISSIONERS	27,729.54	5
POLITICAL SUBDIVISIONS	88,525,106.60	34,602
TEACHERS	288,855,152.61	46,076
LOCAL TEACHERS	10,503,862.68	1,912
GOVERNORS AND WIDOWS	92,316.00	5
AGED STATE EMPLOYEES	412.29	1
AGED TEACHERS	3,274.23	8
OTHERS	<u>154,406.82</u>	<u>256</u>
Total	\$558,669,991.07	124,935

NOTE: NINETY-FIVE PERCENT (95%) OF THE RETIREES ARE ON DIRECT DEPOSIT

PRIOR SERVICE ACTIVITY
OCTOBER 1, 2014 through DECEMBER 31, 2014

Higher Education:	Type Of Service	No. of Members	Years of Service	Amount
	Backpayment	35	38	\$57,262.58
	Military Service	2	6	\$0.00
	Totals	35	38	\$57,262.58

Political Subdivisions:	Type Of	No. of Members	Years of Service	Amount
	Backpayment	76	105	\$171,903.54
	Military Service	7	10	\$0.00
	Redeposit	7	44	\$61,481.14
	Totals	90	159	\$233,384.68

State:	Type Of Service	No. of Members	Years of Service	Amount
	Backpayment	31	15	\$8,901.22
	Military Service	4	3	\$0.00
	Redeposit	4	12	\$80,964.70
	Totals	39	31	\$89,865.92

Teachers	Type Of Service	No. of Members	Years of Service	Amount
	Backpayment	10	10	\$1,584.90
	Military Service	2	5	\$0.00
	Redeposit	8	60	\$212,068.04
	Totals	20	75	\$213,652.94

Grand Totals:	Type Of Service	No. of Members	Years of Service	Amount
	Backpayment	152	168	\$239,652.24
	Military Service	15	25	\$0.00
	Redeposit	19	116	\$354,513.88
	Totals	186	309	\$594,166.12

DISABILITY RETIREMENT REPORT

Disability Statistical Report

Second Quarter 14-15

Disability Applications Received	October	43
	November	19
	December	<u>11</u>
	TOTAL	73
Initial Claims Approved	October	37
	November	13
	December	<u>18</u>
	TOTAL	68
Initial Claims Disapproved	October	09
	November	13
	December	<u>18</u>
	TOTAL	40
Initial Claims Approved after Reconsideration		07
Initial Claims Disapproved after Reconsideration		01
Re-Evaluation Claims Approved		17
Re-Evaluation claims Disapproved		00
Cases Referred to Vocational Rehabilitation		00

**APPROVED FOR DISABILITY
SECOND QUARTER
2014-2015**

Type	Re-E	Re-C	Age	Employer	Position	Svc	AFC	Opt.	Mo. Ben.	Disability Summary
SS-Ord.	NO	NO	51	TEACHER	Teacher	11	\$60,734	B	\$1,311	PTSD and major depressive D/O.
Ord.	YES	NO	43	TEACHER	Teacher	14	\$44,527	A	\$1,052	Major depression, migraine HA's, and mild DDD of lumbar and cervical spine.
Ord.	YES	YES	48	STATE	Secretary	6	\$21,587	A	\$450	DDD with radiculopathy, spondylolisthesis, spinal stenosis, abnormal gait, decreased lumbar ROM S/P cervical fusion and obesity > 300 lbs. with L-leg deep venous thrombosis.
SS-Ord.	NO	NO	52	STATE	Coordinator	29	\$40,062	A	\$1,142	Acute Leukemia requiring chemotherapy.
SS-Ord.	NO	NO	56	TEACHER	Teacher	5	\$51,913	B	\$455	Stage IV Appendix cancer resulting in multiple surgeries, leakage from intestines, and the need for a feeding tube.
SS-Ord.	NO	NO	56	STATE	Officer	17	\$28,668	A	\$677	HTN, herniated disc, degeneration of lumbar spine, chronic pain, depression and anxiety.
SS-Ord.	YES	NO	45	STATE	Secretary	8	\$21,277	A	\$502	Biliary cirrhosis S/P liver transplant, limited ROM, post operative ascites and umbilical hernia.

**APPROVED FOR DISABILITY
SECOND QUARTER
2014-2015**

Type	Re-E	Re-C	Age	Employer	Position	Svc	AFC	Opt.	Mo. Ben.	Disability Summary
Ord.	NO	NO	58	STATE	Officer	16	\$25,312	A	\$548	Metastatic breast cancer.
SS-Ord.	YES	NO	34	TEACHER	Teacher	10	\$43,457	B	\$983	Stage IV colon cancer metastasized to the lungs and liver.
Ord.	NO	NO	59	STATE	Nurse	6	\$50,966	A	\$602	DM II, GERD, Restless Leg Syndrome, Anemia, chronic fatigue, and obesity.
Ord.	YES	NO	38	POL SUB	Manager	5	\$16,404	A	\$388	Pulmonary Arterial HTN, prognosis is poor.
Inact.	NO	YES	48	TEACHER	Counselor	16	\$47,252	D	\$378	IBS, CHF, DM, migraine HA's, chronic fatigue, low back pain, and numbness of L-upper leg, R-foot and arm.
SS-Ord.	NO	NO	58	POL SUB	Cafeteria Worker	23	\$11,496	A	\$312	COPD resulting in chronic pain and difficulty breathing and walking.
Ord.	NO	NO	55	TEACHER	Teacher	26	\$44,780	A	\$1,380	Fibromyalgia, bulging discs, urinary incontinence, and chronic pain.

**APPROVED FOR DISABILITY
SECOND QUARTER
2014-2015**

Type	Re-E	Re-C	Age	Employer	Position	Svc	AFC	Opt.	Mo. Ben.	Disability Summary
SS-Ord.	YES	NO	46	STATE	Trooper	26	\$51,525	A	\$1,637	Brain cancer requiring chemotherapy and radiation.
Ord.	NO	NO	59	TEACHER	Teacher	17	\$47,137	A	\$1,012	RA resulting in Chronic pain of hands, arms, hips and feet, difficulty walking, fatigue and stiffness.
SS-Ord.	NO	NO	57	POL SUB	Med Tech	15	\$38,850	B	\$757	Bilateral OA of shoulders and displacement of Lumbar intervertebral disc without myelopathy resulting in chronic bilateral shoulder and lower extremity pain.
SS-Ord.	NO	NO	52	STATE	Micro-biologist	11	\$47,003	A	\$1,064	Multiple chemical sensitivity (MCS) with dyspnea, fatigue, anxiety, and myoclonic jerk.
SS-Ord.	NO	NO	50	TEACHER	Teacher	13	\$46,035	A	\$1,088	Metastasized Appendix cancer resulting in complete Hysterectomy, removal of spleen, colon, gall bladder, and half of small bowel.
SS-Ord.	NO	NO	52	POL SUB	Special Ed Assistant	8	\$11,268	A	\$207	Myelopathy resulting in severe gait disturbance requiring the use of a cane, walker or wheelchair.
Ord.	YES	NO	49	STATE	Specialist	11	\$38,578	A	\$911	Heart attack followed by CVA resulting in R-sided paralysis and expressive aphasia.

**APPROVED FOR DISABILITY
SECOND QUARTER
2014-2015**

Type	Re-E	Re-C	Age	Employer	Position	Svc	AFC	Opt.	Mo. Ben.	Disability Summary
SS-Ord.	YES	NO	50	POL SUB	Laborer	14	\$35,423	D	\$786	Severe hip pain with decreased ROM, chronic pain, weakness, and the use of cane for ambulation.
SS-Ord.	YES	NO	50	TEACHER	Teacher	12	\$40,405	A	\$955	Fibromyalgia, DM, DDD with radiculopathy and stenosis, chronic pain, bladder and bowel dysfunction, and insomnia.
Ord.	YES	NO	49	POL SUB	EMT	11	\$30,553	A	\$722	Injuries to the spine and neck resulting in frequent HA's and lifting limitations.
Ord.	NO	NO	53	POL SUB	Lieutenant	19	\$48,293	D	\$1,023	PTSD, major depressive D/O and anxiety non-responsive to medication following multiple gunshot wounds in line of duty in 2005.
SS-Ord.	YES	YES	49	POL SUB	Supervisor	13	\$42,373	A	\$1,001	MS, HTN, DM, insomnia, and chronic pain.
Ord.	YES	YES	46	STATE	Service Rep III	15	\$35,885	A	\$848	DM with neuropathy, Stage III Kidney disease, obesity, sleep apnea, and bilateral Carpal Tunnel Syndrome.
SS-Ord.	YES	YES	46	TEACHER	Teacher	23	\$43,364	A	\$1,204	Severe depression and anxiety with suicidal ideation, previous hospitalizations for anxiety and suicide attempt.

**APPROVED FOR DISABILITY
SECOND QUARTER
2014-2015**

Type	Re-E	Re-C	Age	Employer	Position	Svc	AFC	Opt.	Mo. Ben.	Disability Summary
SS-Ord.	YES	NO	46	POL SUB	HVAC Tech	5	\$55,252	A	\$1,224	Stage IV lung cancer metastasized to the brain resulting in L-sided numbness and weakness.
Ord.	YES	NO	41	STATE	Rehab Tech	19	\$27,714	A	\$655	Systemic Lupus, DM with neurological complications, Hypothyroidism, OA, Polyarthopathy and chronic major depression.
Ord.	YES	YES	40	STATE	Program Specialist II	9	\$36,764	A	\$869	Degenerative Scoliosis with radiculopathy, neuropathy, chronic pain and depression.
SS-Ord.	YES	NO	44	POL SUB	Manager	12	\$31,258	A	\$738	ESRD, dialysis 3x weekly resulting in chronic weakness and fatigue.
Ord.	NO	NO	53	TEACHER	Librarian	23	\$56,177	D	\$1,402	Stage III Ovarian cancer with liver metastases, abdominal bloating and pain.
Ord.	NO	NO	58	STATE	Auditor III	10	\$39,037	A	\$561	DDD with spinal cord compression, DJD, OA, DM with neuropathy requiring narcotics for pain, and obesity.
SS-Inact.	NO	NO	43	TEACHER	Counselor	10	\$37,485	A	\$886	Crohn's disease, chronic fatigue, major depression, panic D/O, and allergies to required medications.

**APPROVED FOR DISABILITY
SECOND QUARTER
2014-2015**

Type	Re-E	Re-C	Age	Employer	Position	Svc	AFC	Opt.	Mo. Ben.	Disability Summary
SS-Ord.	NO	NO	50	TEACHER	Teacher	9	\$41,770	A	\$909	PTSD, major depression and generalized anxiety.
Ord.	NO	YES	51	POL SUB	Secretary	14	\$25,447	A	\$601	MS with lower extremity weakness, L-leg drag, ataxia, fatigue, difficulty with ambulation and balance, inability to sit or stand for long, and inability to bend, squat or reach.
Ord.	NO	NO	50	POL SUB	Bus Driver	11	\$14,778	D	\$322	Arthritis, OA, DDD, and chronic pain.
Ord.	NO	NO	52	TEACHER	Teacher	9	\$51,340	A	\$1,051	Narcolepsy, COPD, sleep apnea, and difficulty concentrating.
Ord.	NO	NO	53	TEACHER	Teacher	22	\$49,943	E	\$1,157	Cervical/Lumbar spinal stenosis S/P multiple surgeries resulting in reduced ADL's and chronic pain.
Ord.	YES	YES	49	POL SUB	Admin. Assistant	16	\$33,018	D	\$602	Chronic major depression and anxiety, PTSD, migraine HA's and Chronic Fatigue Syndrome.
Ord.	NO	NO	59	STATE	Admin. Assistant	25	\$31,879	D	\$796	Metastatic lung cancer.

**APPROVED FOR DISABILITY
SECOND QUARTER
2014-2015**

Type	Re-E	Re-C	Age	Employer	Position	Svc	AFC	Opt.	Mo. Ben.	Disability Summary
Ord.	NO	NO	59	POL SUB	Officer	22	\$48,377	D	\$1,141	CAD, CHF with EF 20% and Cardiomyopathy.
Ord.	NO	NO	52	STATE	Program Specialist II	11	\$34,966	A	\$785	COPD requiring Oxygen, DM, CHF, morbid obesity and sleep apnea.
Ord.	NO	NO	51	POL SUB	Officer	14	\$36,712	B	\$822	Esophageal cancer with metastases to thoracic spine, pulmonary embolism, bilateral pleural effusion and chronic anemia.
Ord.	YES	NO	48	POL SUB	Bus Driver	13	\$11,374	A	\$269	DDD with back, L-abdominal and L-knee pain non-responsive to epidural injections.
Ord.	YES	NO	47	STATE	Officer	18	\$36,002	A	\$851	Lumbar disc disease, L4-L5 Spondylolisthesis, severe neck and low back pain S/P lumbar fusion.
Ord.	YES	YES	42	STATE	Accounting Tech	16	\$29,255	A	\$691	DDD, Fibromyalgia, and Migraine HA's.
SS-Ord.	NO	NO	54	STATE	Accounting Tech I	19	\$30,013	A	\$709	Aortic Stenosis, Diastolic heart failure, HTN, chronic Kidney disease, and bilateral hip replacements resulting in decreased ROM.

**APPROVED FOR DISABILITY
SECOND QUARTER
2014-2015**

Type	Re-E	Re-C	Age	Employer	Position	Svc	AFC	Opt.	Mo. Ben.	Disability Summary
SS-Ord.	NO	NO	58	STATE	Cafeteria Worker	5	\$23,257	A	\$275	OA, Kidney disease, HTN, and bilateral knee replacements.
SS-Ord.	NO	NO	54	POL SUB	Janitor	14	\$18,080	B	\$364	CVA with R-sided paralysis requiring need to stay in skilled nursing facility to assist with all ADL's.
SS-Ord.	YES	NO	50	TEACHER	Teacher	18	\$58,312	A	\$1,378	Major depression and ADD.
SS-Ord.	YES	NO	43	STATE	Officer	11	\$33,575	A	\$793	Failed Back Syndrome resulting in permanent nerve damage and chronic HA's.
SS-Ord.	YES	NO	58	POL SUB	Sherriff	25	\$42,523	D	\$1,067	DM, COPD, the need for a heart transplant, a broken leg and ankle which will not heal, and memory loss.
Inact.	NO	NO	53	STATE	Laborer	15	\$19,740	A	\$270	Fall from ladder resulting in multiple fractures to L-wrist, L-femur, L-L3 transverse process, ribs, face and skull, reduced ADL's and chronic pain.
SS-Ord.	YES	NO	50	STATE	Interviewer II	12	\$28,937	A	\$684	Paranoid Schizophrenia, severe anxiety, and recent diagnosis of Breast cancer.

**APPROVED FOR DISABILITY
SECOND QUARTER
2014-2015**

Type	Re-E	Re-C	Age	Employer	Position	Svc	AFC	Opt.	Mo. Ben.	Disability Summary
Ord.	YES	NO	39	TEACHER	Teacher	16	\$41,241	B	\$892	malignant frontal lobe glioblastoma with metastases.
Ord.	YES	NO	48	POL SUB	Bus Driver	18	\$15,526	A	\$367	Myasthenia Gravis resulting in double vision and eyes closing involuntarily, DM II, and morbid obesity.
Ord.	NO	NO	58	STATE	Interviewer	9	\$29,372	A	\$399	Stage IV rectal cancer with metastases to the lungs.
SS-Ord.	NO	NO	53	TEACHER	Teacher	7	\$61,154	A	\$1,035	Sarcoidosis, Narcolepsy, Pulmonary HTN with chronic lung infections and pneumonia.
Ord.	YES	NO	51	POL SUB	Captain	22	\$46,933	A	\$1,229	S/P CVA with significant residual impairments in areas of language, memory and executive function.
SS-Ord.	NO	NO	53	TEACHER	Teacher	8	\$47,682	A	\$864	Alzheimer's disease resulting in memory loss and impaired ADL's.
SS-Ord.	NO	NO	56	STATE	Secretary	7	\$22,927	B	\$250	Stage IV brain cancer.

**APPROVED FOR DISABILITY
SECOND QUARTER
2014-2015**

Type	Re-E	Re-C	Age	Employer	Position	Svc	AFC	Opt.	Mo. Ben.	Disability Summary
Ord.	NO	NO	51	STATE	Officer	15	\$31,869	A	\$753	Bi-Polar D/O, chronic major depression w/recent psych hospitalization, anorexia, kidney stones and joint pain.
SS-Ord.	YES	NO	46	TEACHER	Teacher	16	\$67,953	B	\$1,486	Malignant Glioblastoma of the brain resulting in short-term memory loss, and side-effects of medication resulting in HTN, low blood counts and repeated episodes of pneumonia.
Ord.	YES	NO	47	POL SUB	Mechanic	10	\$27,865	A	\$658	Fused thoracic spine and bulging discs resulting in lumbar radiculopathy and chronic pain.
Ord.	YES	NO	50	STATE	Manager	17	\$30,797	D	\$660	COPD, and bulging discs resulting in chronic pain, and difficulty standing, walking, or sitting for long periods of time.
Ord.	NO	NO	52	STATE	Specialist	16	\$47,024	A	\$1,111	CVA with hemiplegia, RA, Lupus, back and knee pain and the use of a cane for ambulation.

DISAPPROVED FOR DISABILITY SECOND QUARTER 2014-2015

Type	Re-C	Age	Employer	Position	SVC	Disability Summary	Reason Denied
Acc.	No	55	State	Officer	4	OJA resulting in damage to R-ankle and R-Shoulder.	Capable Sedentary work.
Acc.	No	41	State	Hwy Maintenance	2	OJA resulting in injuries to ankles, feet and toes.	Medical records state injuries to feet occurred prior to OJA.
Ord.	No	49	State	Admin. Assistant	24	Morbid Obesity, DM, depression, and chronic infections.	No neuropathy or vision problems due to DM, S/P gastric bypass. Not enough time has passed to see how it will effect mbr's condition.
Ord.	No	47	State	Examiner I	19	Severe depression and anxiety.	Condition not totally disabling from all gainful employment.
Ord.	No	46	Teacher	Teacher	21	RA, Fibromyalgia, and major depression.	Mbr responding to medications, capable sedentary-medium work.
Ord.	No	51	State	Nursing Assistant	23	Sjorgens disease, Fibromyalgia, Migraine HA's, lower back pain, restless leg syndrome, PTSD, and anxiety.	Mbr's doctors and medical records do not support total disability.
Ord.	No	55	State	Admin. Assistant	13	Fibromyalgia, major depression, Scoliosis, and uncontrolled DM II.	Mild Scoliosis, normal physical exam, and no limitation of motion.
Ord.	No	56	State	Custodian	8	S/P breast cancer with chemotherapy and radiation resulting in neuropathy.	Medical records do not describe any physical limitations following treatment. Mbr capable Sedentary work.
Acc.	Yes	51	State	Hwy Maintenance	4	OJA in May 2012. Hx of ETOH, diastolic dysfunction, and CHF.	Mbr not disabled from OJA. Not vested. Not eligible for retirement benefit.
Ord.	No	52	Pol. Sub	Equipment Operator	19	Lumbar Spondylosis S/P fusion, multiple bulging discs, and arthritis.	Mbr's Dr. states capable light work. Recs document mbr has done well post-op.
Acc.	No	43	State	Hwy Maintenance	19	OJA resulting in mobility issues and chronic pain of neck. Recs also document DM.	Mbr's Dr. states capable light work.
Ord.	No	51	Pol. Sub	Secretary	14	Relapsing remitting MS with ataxic gait and Lower extremity weakness.	MRI of brain and cervical cord shows inactive demyelination. Mbr's Dr. states capable sedentary work.
Ord.	No	43	State	Communications Officer	14	S/P reconstructive knee surgery with muscle and never damage and low back pain and leg discomfort.	Medical records do not support total disability.

DISAPPROVED FOR DISABILITY SECOND QUARTER 2014-2015

Type	Re-C	Age	Employer	Position	SVC	Disability Summary	Reason Denied
Ord.	No	55	State	Mail Clerk	12	Schizoaffective D/O with hallucinations, paranoia, and delusional thinking.	Mbr supplied insufficient medical documentation to support claim.
Ord.	No	41	Pol. Sub	Equipment Operator	14	DDD with L4-L5 HNP, decreased ROM, severe back pain with radiculopathy, CAD S/P stent placement, DM, and obesity.	MRI shows signs of mild lumbar disc disease and normal gait. Mbr capable sedentary work.
Ord.	No	44	State	Coordinator	7	Post laminectomy syndrome, chronic epidural fibrosis, lumbar disc disease with R-leg radiculopathy and weakness, and peripheral neuropathy.	Minimal medical records. Recs do not describe any major activity limitations, and steroid injections are helping with pain.
Ord.	Yes	41	Pol. Sub	Officer	16	Sleep apnea, moderate COPD, Asthma, depression and panic attacks.	Stable COPD, lungs clear w/o significant emphysema, no recs from Psychiatrist, PCP states, oriented to person, place/time, intact insight/judgment, normal affect.
Ord.	No	52	State	Driver's license examiner	18	Anxiety/depression, Panic D/O, insomnia, and hx of sciatica, hip, leg, and back pain.	PCP doesn't support disability, states anxiety is due to job stress and difficulty with boss. Suggest employer change.
Ord.	No	39	State	Investigator III	7	Chronic fatigue, memory loss, PTSD and depressive mood.	Mbr's Dr. does not support total disability, no known psychiatric hospitalizations, and mbr states sleeping better.
Acc.	No	54	State	Officer	24	OJA resulting in contusion on face, scalp and neck, and an elbow laceration.	Mbr's Dr. does not support total disability. Mbr capable sedentary to light work.

FINANCIAL STATEMENTS

TENNESSEE CONSOLIDATED RETIREMENT SYSTEM
STATEMENT OF FIDUCIARY NET POSITION
AS OF DECEMBER 31, 2014

ASSETS

Cash and Cash Equivalents	\$182,289,219.03
Receivables	
Member receivable	577,090.90
Employer receivable	834,651.17
Accrued interest & dividend receivable	141,418,250.84
Real estate income receivable	1,899,853.88
Derivative instruments receivable	180,746,513.80
Investments sold	24,413.21
Total receivables	<u>325,500,773.80</u>
Investments, at fair value	
Short-term securities	77,919,451.80
Government securities	8,780,303,856.39
Corporate securities	6,106,635,478.44
Corporate stocks	23,826,063,454.07
Private equities & Strategic Lending	1,723,340,823.65
Real estate	2,515,215,932.96
Invested securities lending collateral	4,860,639,790.00
Total investments	47,890,118,787.31
Capital Assets (net)	28,341,603.62
TOTAL ASSETS	<u>48,426,250,383.76</u>

LIABILITIES

Accounts payable	
Death benefits and refunds payable	33,451.71
Retiree insurance premium payable	8,478,146.81
Other	810,187.14
Investments purchased	13,236,571.60
Derivative instruments payable	180,746,513.81
Securities lending collateral	4,860,639,790.00
TOTAL LIABILITIES	<u>5,063,944,661.07</u>
NET POSITION RESTRICTED FOR PENSIONS	<u>43,362,305,722.69</u>

See Accompanying Notes to the Financial Statements

UNAUDITED

TENNESSEE CONSOLIDATED RETIREMENT SYSTEM
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
JULY 1, 2014 THROUGH DECEMBER 31, 2014

ADDITIONS

Contributions

Member contributions	\$106,804,706.75
Employer contributions	422,677,383.23
Total contributions	529,482,089.98

Investment income

Net appreciation in fair value of investments	702,528,416.73
Interest, Dividends & Real Estate Income	354,704,713.86
Total investment income	1,057,233,130.59
Less: Investment expense	(11,539,752.91)
Net income from investing activities	1,045,693,377.68

Securities lending activities

Securities lending income	8,379,407.81
Less: securities lending expense	(690,339.14)
Net income from securities lending activities	7,689,068.67

Net investment income	1,053,382,446.35
------------------------------	-------------------------

TOTAL ADDITIONS	1,582,864,536.33
------------------------	-------------------------

DEDUCTIONS

Annuity benefits	1,088,701,373.32
Death benefits	2,057,399.42
Refunds	25,988,733.23
Administrative expenses	8,968,803.53

TOTAL DEDUCTIONS	1,125,716,309.50
-------------------------	-------------------------

NET INCREASE	457,148,226.83
---------------------	-----------------------

NET POSITION RESTRICTED FOR PENSIONS

BEGINNING OF YEAR	42,905,157,495.86
END OF YEAR	\$43,362,305,722.69

See Accompanying Notes to the Financial Statements

UNAUDITED

The Tennessee Consolidated Retirement System (TCRS) is a public employee retirement system comprised of defined benefit pension plans covering Tennessee State employees, including employees of the state's higher education systems, teachers, and employees of political subdivisions in Tennessee. The TCRS was established in 1972 by a statutory enactment of the Tennessee General Assembly. The provisions of the TCRS are codified in Tennessee Code Annotated Title 8, Chapters 34-37. In accordance with Tennessee Code Annotated Title 8, Chapter 34, Section 202, all funds invested, securities, cash, and other property of the TCRS are held in trust and can be expended only for the purposes of the trust. Although the assets for all pension plans within the TCRS are commingled for investment purposes, the assets of each separate plan may legally be used only for the payment of benefits to the members of that plan and for its administration, in accordance with the terms of the plan.

Note 1: Summary of Significant Accounting Policies

Reporting entity: The TCRS is included in the State of Tennessee Financial Reporting Entity. Because of the state's fiduciary responsibility, the TCRS has been included as a pension trust fund in the *Tennessee Comprehensive Annual Financial Report*.

Measurement focus and basis of accounting: The accompanying financial statements have been prepared in conformity with generally accepted accounting principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB). The financial statements have been prepared using the flow of economic resources measurement focus and the accrual basis of accounting. Under the accrual method, revenues are recorded when earned, and expenses are recorded at the time liabilities are incurred.

Plan member and employer contributions are recognized in the period of time for which they are due, in accordance with legal provisions. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan.

Cash and cash equivalents: Cash and cash equivalents includes cash, short-term investments with a maturity date within three months of the acquisition date, cash management pools, and cash invested in a short-term, open-end mutual fund under the contractual arrangement for master custody services. Cash received by the TCRS, that cannot be invested immediately in securities or is needed for operations, is invested in the State Pooled Investment Fund sponsored by the State of Tennessee and administered by the State Treasurer.

Method used to value investments: Investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. The fair value of real estate investments is determined at least every three years by qualified, independent appraisers who are members of the Appraisal Institute. In those years independent appraisals are not conducted, appraisals are completed internally by real estate advisors. The fair value of private equity investments is determined by the fund managers using various methodologies, as applicable under GAAP. In many cases, these valuations are additionally reviewed by advisory boards comprised of a subgroup of the fund's investors. These valuations are audited on an annual basis by independent accounting firms engaged by the private equity fund managers. Investment income includes realized and unrealized appreciation (depreciation) in the fair value of investments. Interest income is recognized when earned. Securities and securities transactions are recorded in the financial statements on trade-date basis. Real estate transactions are recorded in the financial statements at the time of closing.

Capital assets: Capital assets consist of internally generated computer software in development and in the first two phases of implementation, reported at historical cost less any applicable amortization. Capital assets are defined by the state as assets with an initial individual cost of \$5,000 or more and an estimated useful life in excess of two years. Software in development was valued at \$17,978,338 at year end and will be amortized using the straight line method over the ten year estimated life of the system once a phase is implemented. The first phase

UNAUDITED

Tennessee Consolidated Retirement System
Notes to Financial Statements
December 31, 2014

Plan membership: At June 30, 2014, the membership of the pension plans consisted of the following:

	Public Employee Retirement Plan	Teacher Legacy Pension Plan	Total
Inactive plan members or beneficiaries currently receiving benefits	87,422	45,869	133,291
Inactive vested plan members entitled to but not yet receiving benefits	32,787	6,347	39,134
Inactive non-vested plan members entitled to refund of member account balance	28,341	16,334	44,675
Active plan members	135,554	78,506	214,060
Total membership	284,104	147,056	429,032
Number of participating employers	508	144	652

Membership above includes all plans whether open or closed.

Benefits provided: The TCRS provides retirement, disability, and death benefits. The benefits of the TCRS are established by state law (Tennessee Code Annotated, Title 8, Chapters 34-37). In general, the benefits may be amended prospectively by the General Assembly for employees becoming members of the TCRS after June 30, 2014. Amendments of benefits for employees becoming members before July 1, 2014 may be restricted by precedent established by the Tennessee Supreme Court.

Teacher Legacy Pension Plan

Members of the Teacher Legacy Pension Plan are eligible to retire at age 60 with 5 years of service credit or after 30 years of service credit regardless of age. Plan members are entitled to receive unreduced service retirement benefits which are determined to be 1.575 percent of the member's highest five consecutive year average compensation multiplied by the member's years of service credit. Service related disability benefits are provided regardless of length of service. Five years of service is required for non-service related disability eligibility. The service related and non-service related disability benefits are determined in the same manner as a service retirement benefit but are reduced 10 percent and include projected service credits. A variety of death benefits are available under various eligibility criteria. Member and beneficiary annuitants are entitled to automatic cost of living adjustments (COLAs) after retirement. A COLA is granted each July for annuitants retired prior to the 2nd of July of the previous year. The COLA is based on the change in the consumer price index (CPI) during the prior calendar year, capped at 3 percent, and applied to the current benefit. No COLA is granted if the change in the CPI is less than one-half percent. A one percent COLA is granted if the CPI change is between one-half percent and one percent.

Public Employee Retirement Plan

State employees are eligible to retire at age 60 with 5 years of service credit or after 30 years of service credit regardless of age. Plan members are entitled to receive unreduced service retirement benefits which are

UNAUDITED

Note 3: Deposits and Investments

Statutory Authority: State statute authorizes the TCRS to maintain cash, not exceeding ten percent of the total amount of funds in the retirement system, on deposit in one or more banks, savings and loan associations or trust companies that are qualified as state depositories. The TCRS does not utilize its own bank accounts but invests in the State Pooled Investment Fund for the initial deposit of funds and for its operating cash needs. The State Pooled Investment Fund is authorized by state statute to invest funds in accordance with policy guidelines approved by the Funding Board of the State of Tennessee. The current resolution of that board gives the Treasurer authority to invest in collateralized certificates of deposit in authorized state depositories, prime commercial paper, prime bankers' acceptances, certain repurchase agreements and various U.S. Treasury and Agency obligations. The State Pooled Investment Fund is also authorized to enter into securities lending agreements in which U.S. Government Securities may be loaned for a fee. The loaned securities are transferred to the borrower by the custodial agent upon simultaneous receipt of collateral securities.

State statute also authorizes the TCRS to invest in bonds, debentures, preferred stock and common stock, real estate and in other good and solvent securities subject to the approval of the Board of Trustees, but further subject to the following statutory restrictions and provisions:

- a. The total sum invested in common and preferred stocks shall not exceed seventy-five percent (75 percent) of the total of the funds of the retirement system.
- b. The total sum invested in notes and bonds or other fixed income securities exceeding one year in maturity shall not exceed seventy-five percent (75 percent) of the total funds of the retirement system.
- c. Within the restrictions in (a) and (b) above, an amount not to exceed twenty-five percent (25 percent) of the total of the funds of the retirement system may be invested in securities of the same kinds, classes, and investment grades as those otherwise eligible for investment in various approved foreign countries, provided that such percentage may be increased by the board with the subsequent approval of the council on pensions and insurance.
- d. Within the restrictions in (a) and (b) above, funds may be invested in Canadian securities which are substantially of the same kinds, classes and investment grades as those otherwise eligible for investment.
- e. The total amount of securities loaned under a securities lending program cannot exceed thirty percent (30 percent) of total assets.
- f. The total sum invested in real estate shall not exceed ten percent (10 percent) of the market value of total assets.
- g. The total sum invested in private equities shall not exceed ten percent (10 percent) of the market value of total assets.

State statute also authorizes the TCRS to invest in forward contracts to hedge its foreign currency exposure and to purchase or sell domestic equity index futures contracts for the purpose of asset allocation relating to the domestic equity portfolio. The total amount of the financial futures contract obligation shall not exceed ten percent (10 percent) of the market value of total assets. Gross exposure to approved fixed income financial instruments will be limited to 10% of the market value of the System's total assets for risk mitigating positions and 10% for risk positions. Position sizes will be measured by notional amounts. Options will be measured in their notional equivalents.

UNAUDITED

Tennessee Consolidated Retirement System
Notes to Financial Statements
December 31, 2014

standby commercial paper purchaser, the TCRS receives an annual fee of 25 basis points on the \$350 million maximum issuance under this agreement during times when both Moody's and Standard and Poor's investment ratings assigned to the State of Tennessee's general obligation bonds are Aaa and AAA respectively, 40 basis points during times when either Moody's or Standard and Poor's has assigned ratings of Aa and AA respectively, or 75 basis points during times when either Moody's or Standard and Poor's has assigned ratings lower than Aa and AA respectively. In the unlikely event that the TCRS would be called upon to purchase the commercial paper, the TCRS would receive interest at a rate equal to prime plus 75 basis points during the first 30 consecutive days, plus an additional 50 basis points for each consecutive 30 days thereafter, up to a maximum rate allowed by state law.

Note 4: Net Pension Asset of the Teacher Legacy Pension Plan for Local Education Agencies

The components of net pension liability of the Teacher Legacy Pension Plan at June 30, 2014, were as follows:

Total pension liability	\$ 21,151,860,511
Plan fiduciary net position	\$ 21,214,973,134
Net pension asset	<u>\$ 63,112,623</u>
Fiduciary net position as a percentage of the total pension liability	100.30%

Actuarial assumptions: The total pension liability was determined by an actuarial valuation as of July 1, 2013, updated to roll forward to June 30, 2014, using the following actuarial assumptions applied to all prior periods included in the measurement:

Inflation	3.0 percent
Salary Increases	Graded salary ranges from 8.97 to 3.71 percent based on age, including inflation, averaging 4.25 percent
Investment Rate of Return	7.5 percent, net of pension plan investment income, including inflation
Cost of Living Adjustment	2.5 percent

Mortality rates were based on actual experience from the June 30, 2012 actuarial experience study plus some adjustment for expected future improvement in life expectancy.

The actuarial assumptions used in the July 1, 2013 actuarial valuation were based on the results of an actuarial experience study performed for the period July 1, 2008 through June 30, 2012. The demographic assumptions were adjusted to more closely reflect actual and expected future experience.

The long-term expected rate of return on pension plan investments was established by the TCRS Board of Trustees in conjunction with the June 30, 2012 actuarial experience study by considering the following three techniques: (1) the 25-year historical return of the TCRS at June 30, 2012, (2) the historical market returns of asset classes from 1926 to 2012 using the TCRS investment policy asset allocation, and (3) capital market projections that were utilized as a building-block method in which best-estimate ranges of expected future real rate of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. Four sources of capital market projections were blended and utilized in the third technique. The blended capital market projection established the long-term expected rate of return by weighting the expected future real rate of return by the target asset allocation percentage and by adding inflation of 3 percent. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

UNAUDITED